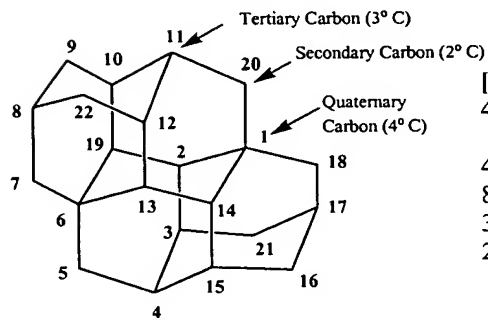
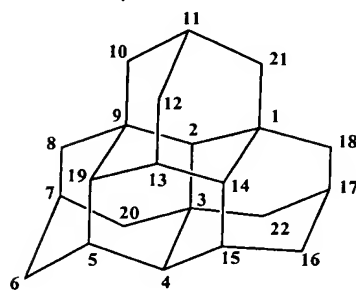


FIG. 1**[121] Tetramantane (*anti*-)**

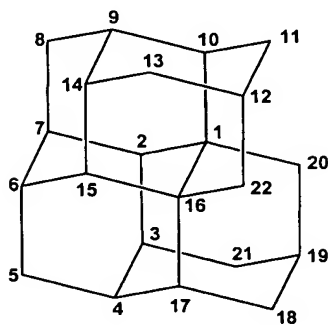
4 non-equivalent tertiary carbons:

4, 11 (equivalent)
8, 17 (equivalent)
3, 10, 12, 15 (equivalent)
2, 13, 14, 19 (equivalent)

**[122] Tetramantane (*iso*-)**

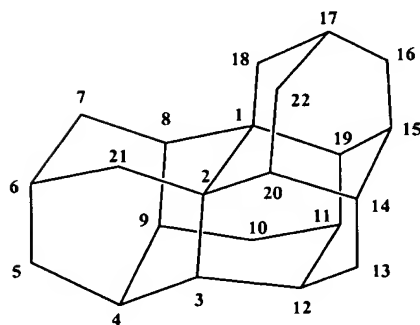
4 non-equivalent tertiary carbons:

2
4, 14, 19 (equivalent)
5, 13, 15 (equivalent)
7, 11, 17 (equivalent)

**[123]A Tetramantane (*skew*- A)**

6 non-equivalent tertiary carbons:

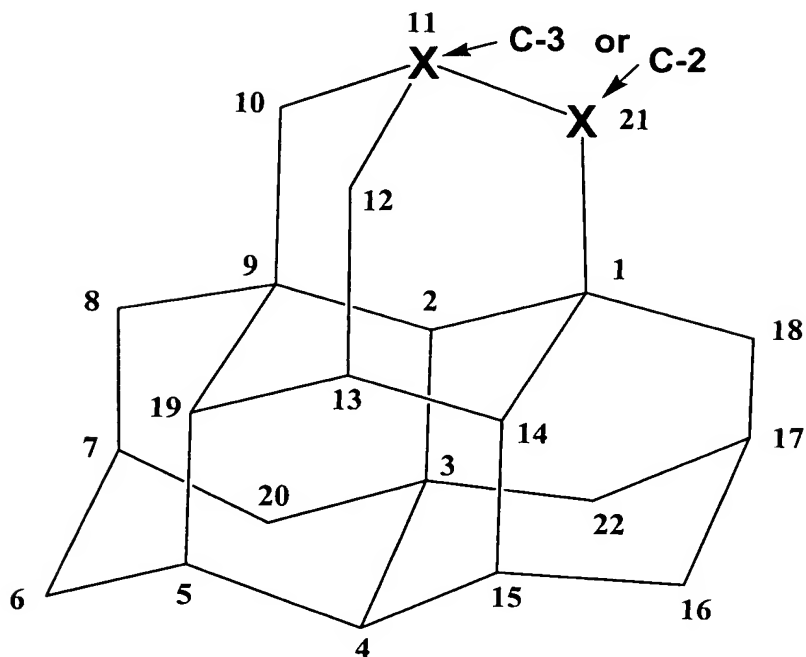
6, 7 (equivalent)
4, 9 (equivalent)
3, 14 (equivalent)
2, 15 (equivalent)
10, 17 (equivalent)
12, 19 (equivalent)

**[123]B Tetramantane (*skew*- B)**

6 non-equivalent tertiary carbons:

6, 17 (equivalent)
4, 15 (equivalent)
11, 12 (equivalent)
3, 19 (equivalent)
9, 14 (equivalent)
8, 20 (equivalent)

FIG. 2



X		Heat of Formation (Kcal/mol)
<i>iso</i> -Tetramantane		-52.75
O	C-2	-78.57
S	C-2	-35.22
Se	C-2	-31.26
B	C-2	-18.40
	C-3	-9.32
N	C-2	-34.28
	C-3	-26.94
P	C-2	-16.19
	C-3	-15.85
As	C-2	-20.68
	C-3	-18.63

FIG. 3

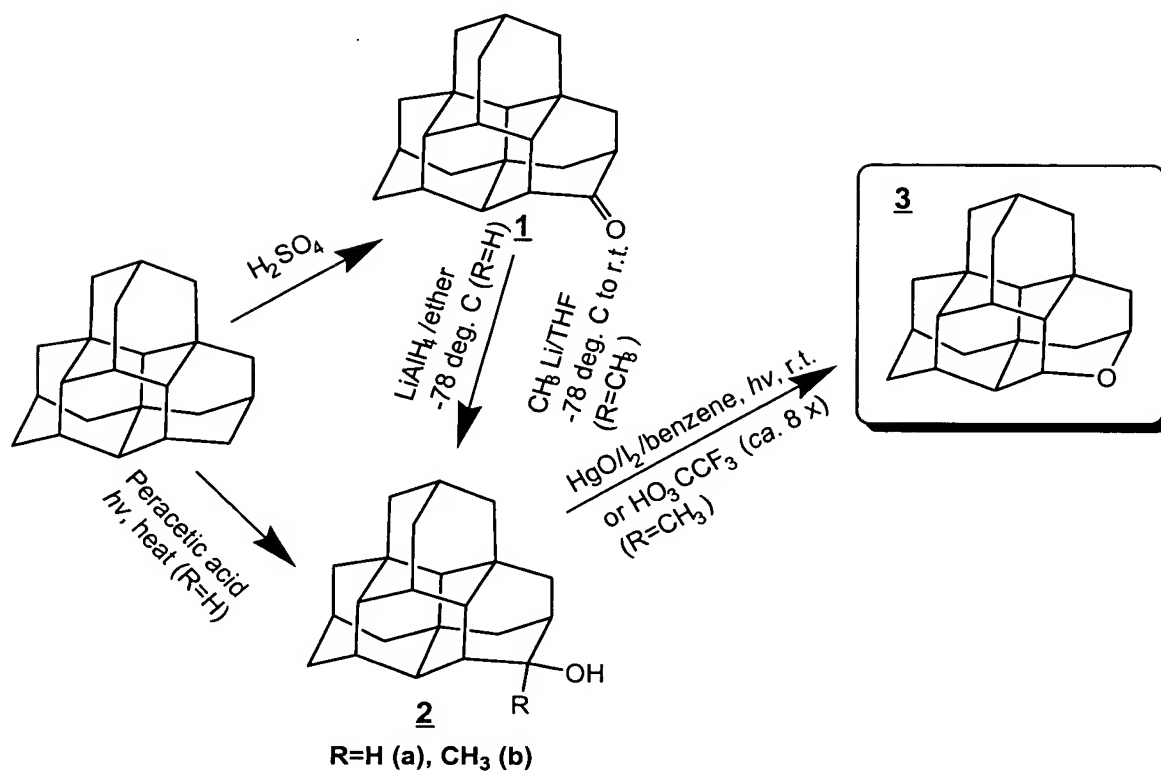


FIG. 4

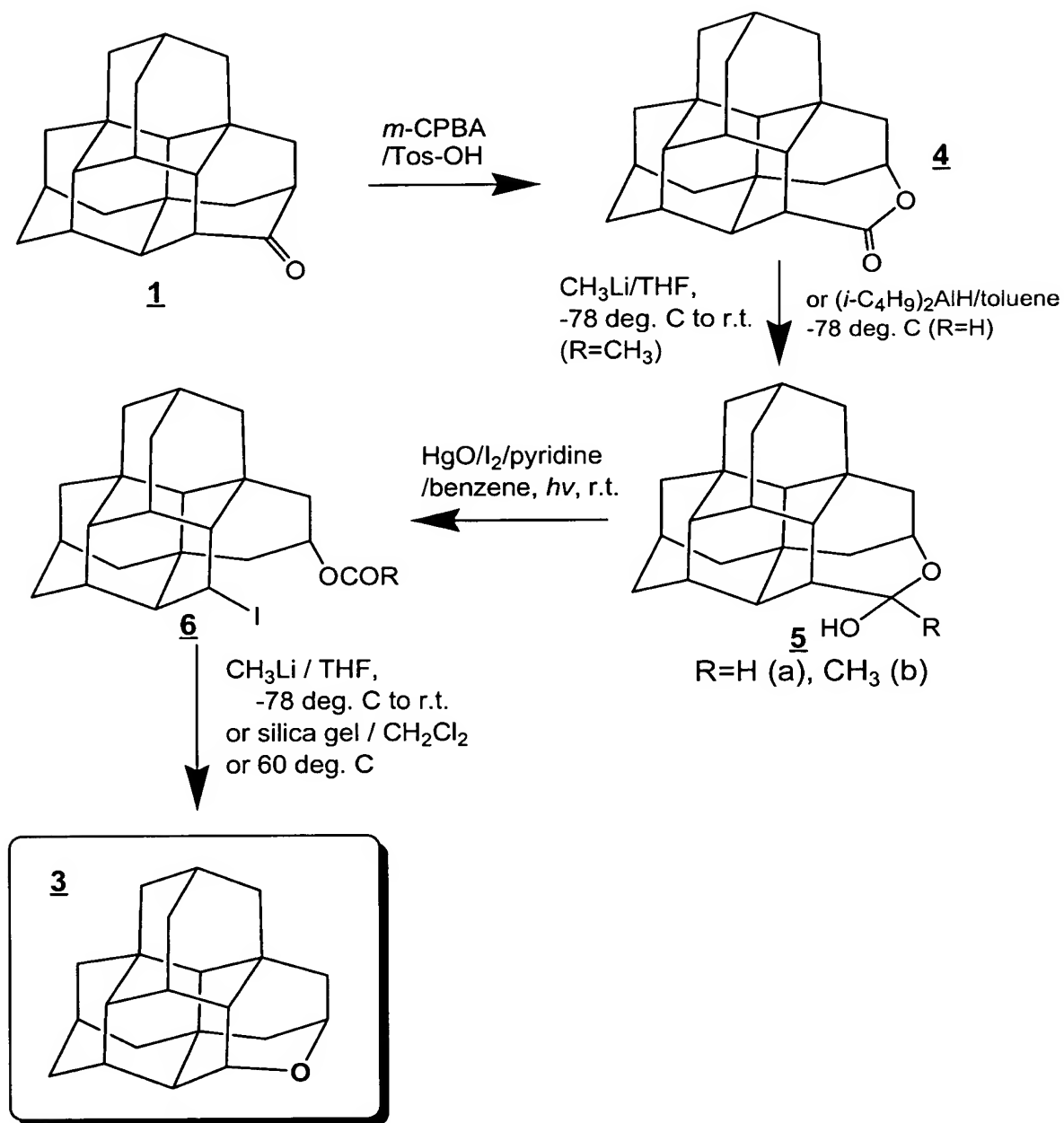


FIG. 5

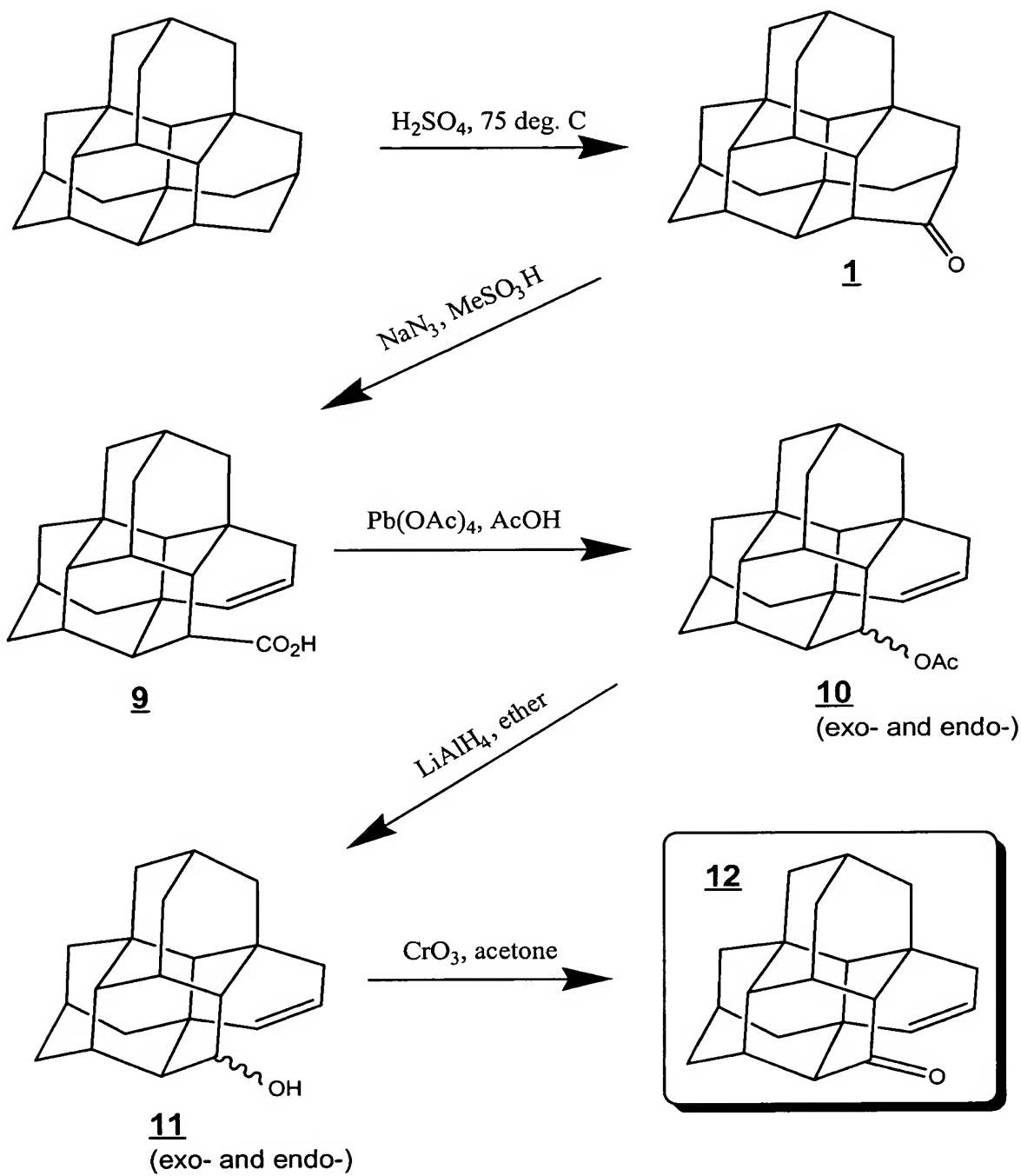


FIG. 5 (cont'd)

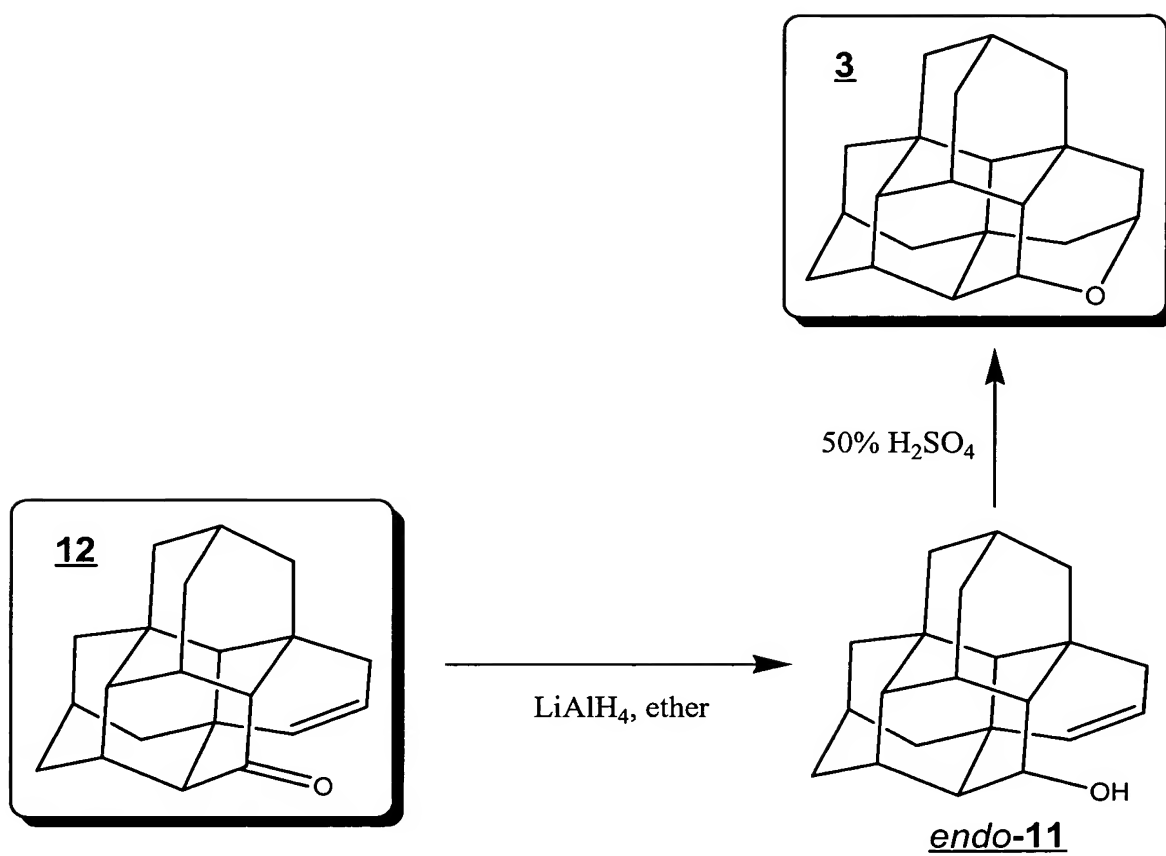


FIG. 6

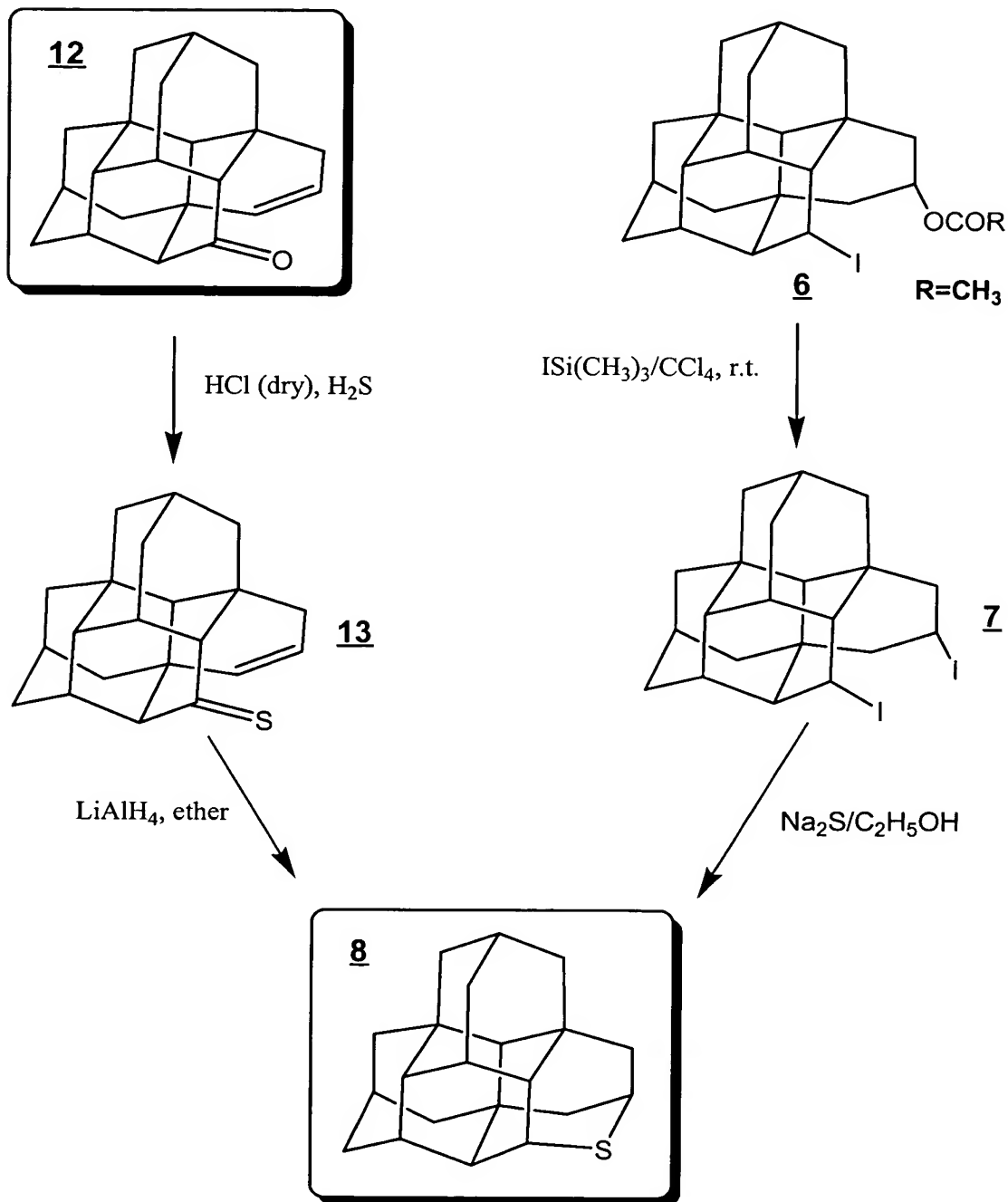


FIG. 7

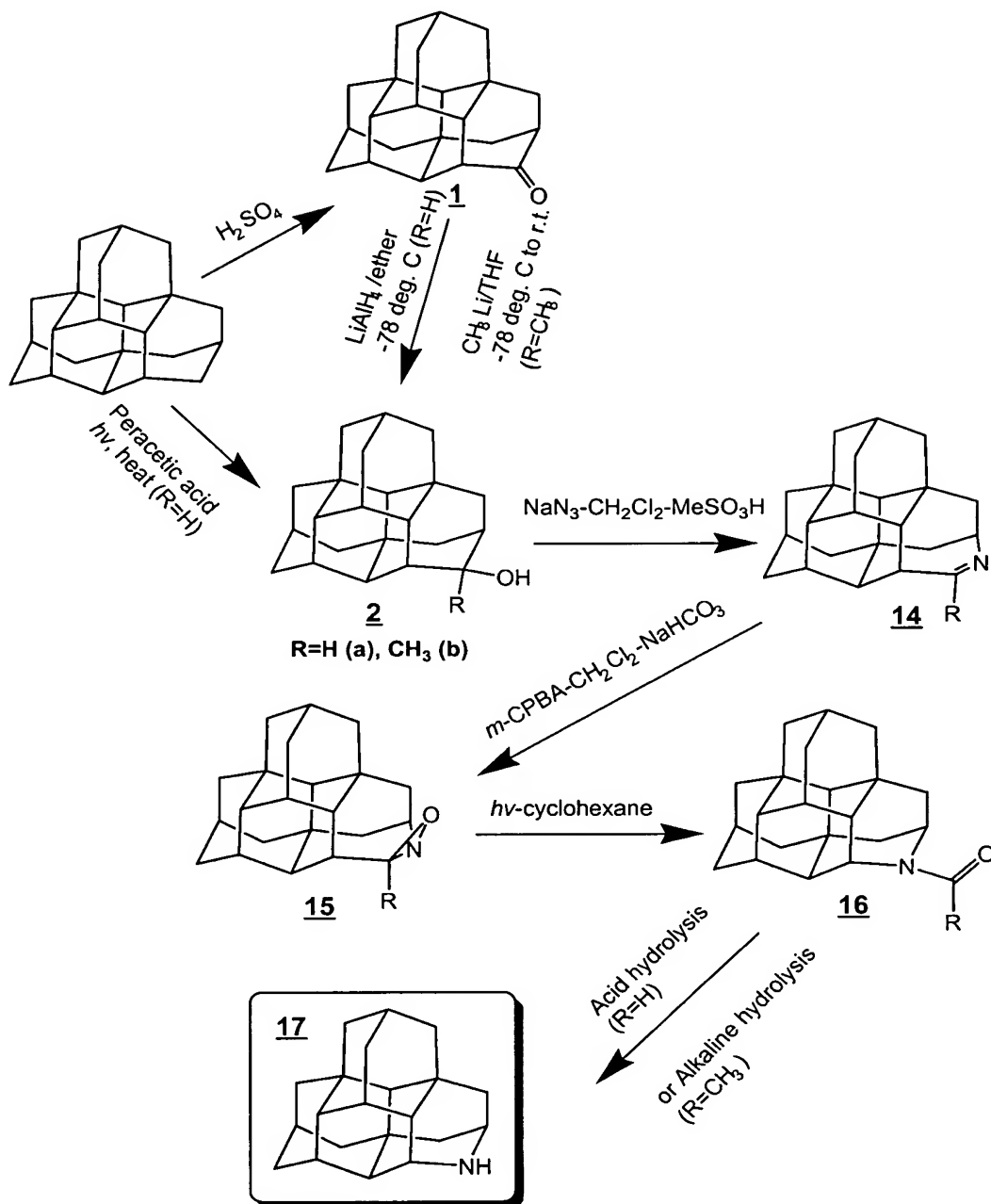


FIG. 8

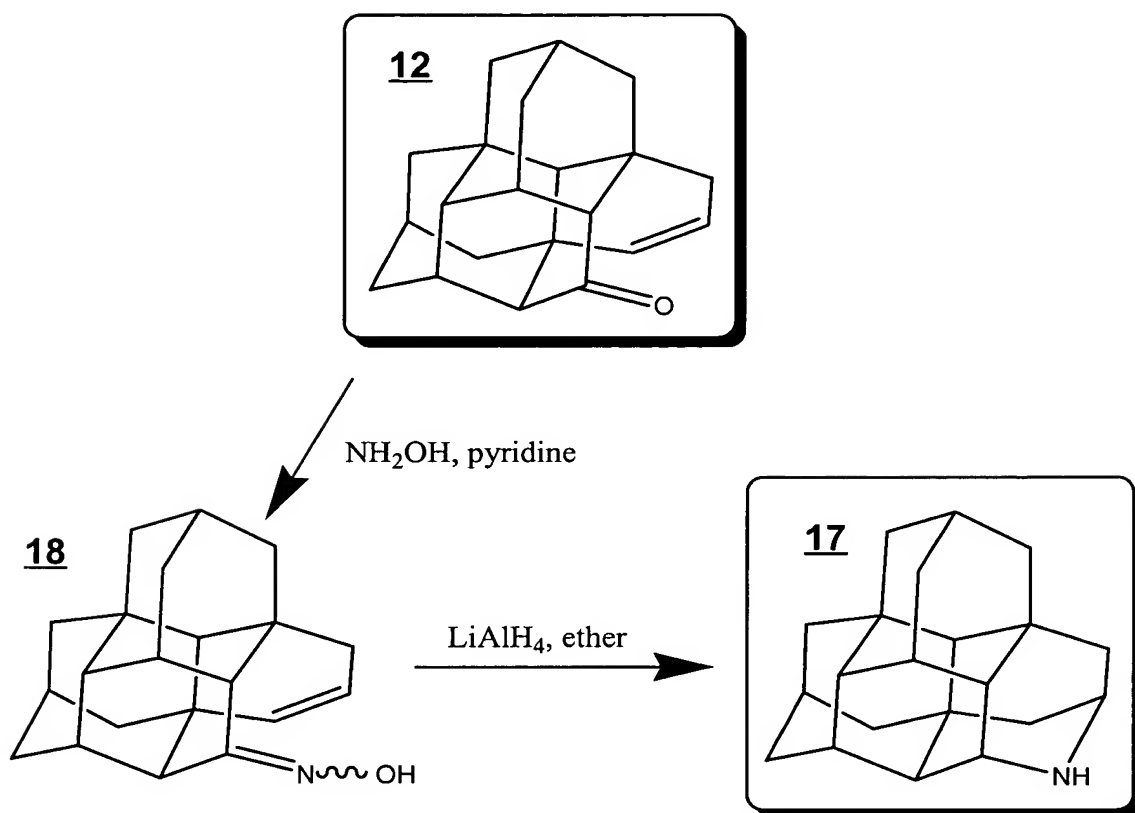


FIG. 9

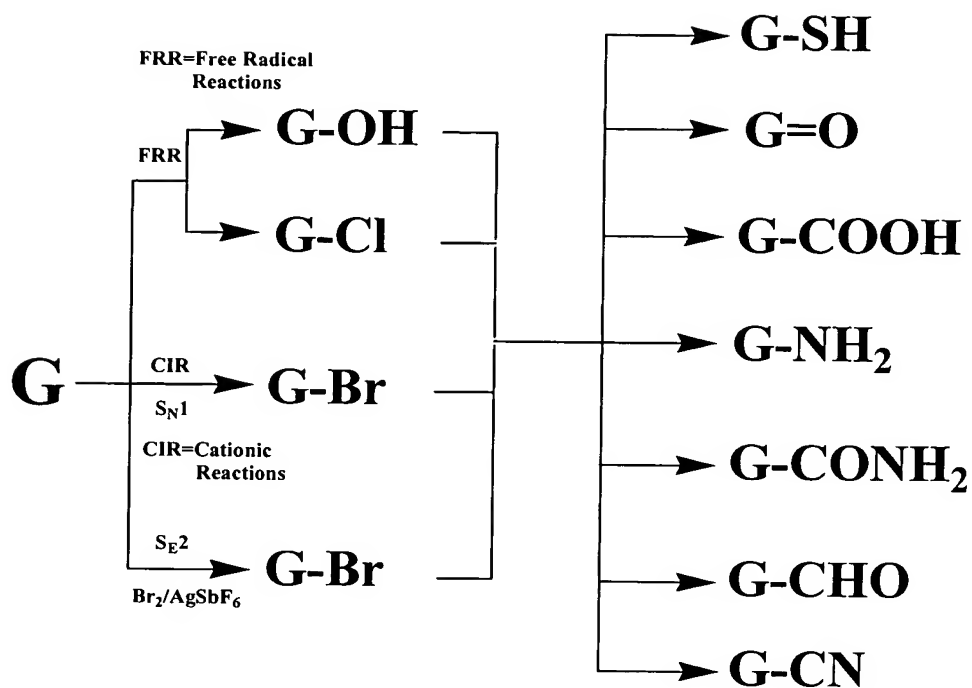


FIG. 10

Representative Ways of Generation of Heterodiamondoid Cations

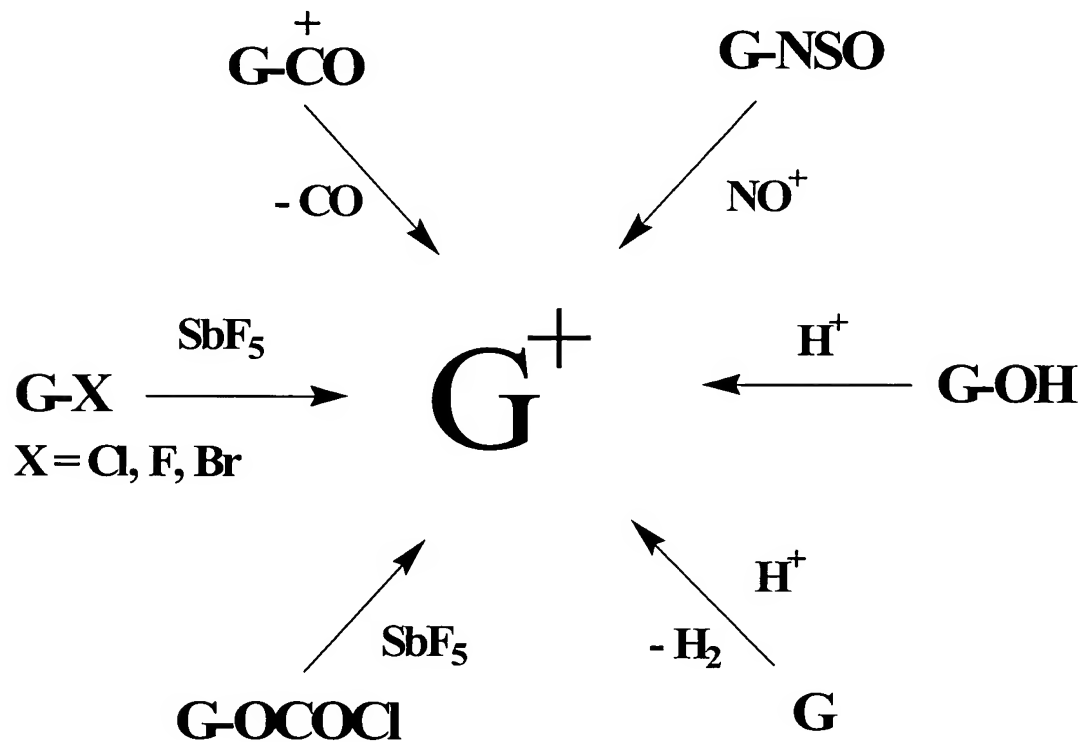


FIG. 11

Representative S_N1 Reactions of Heterodiamondoid Carbocations

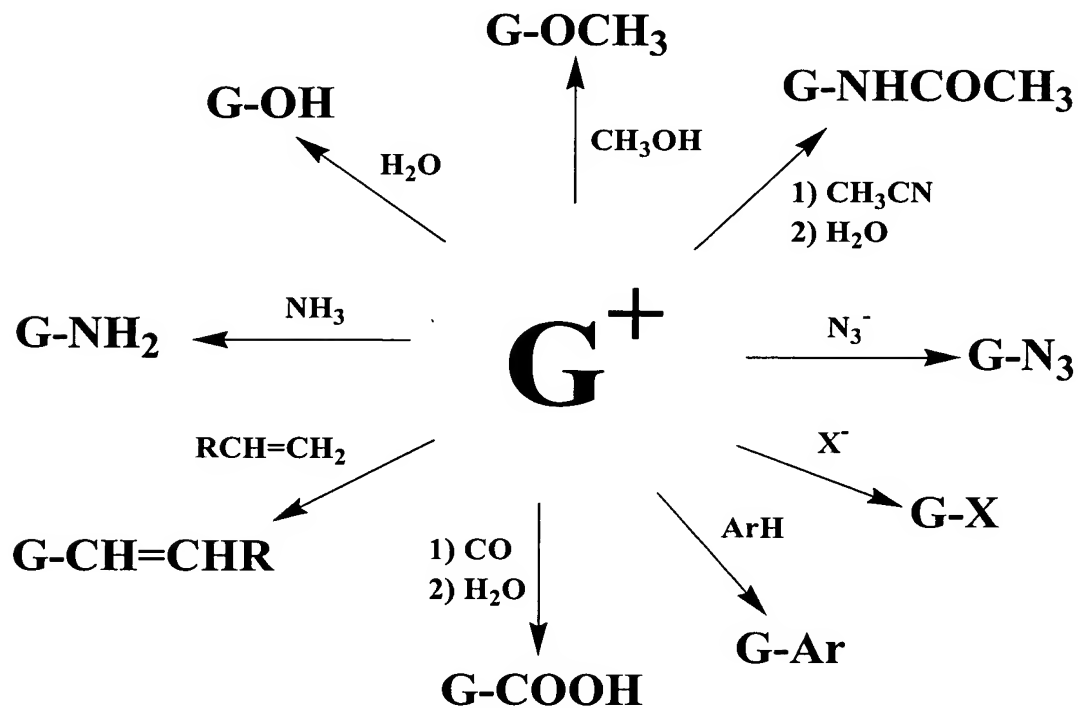


FIG. 12

Representative S_E2 Reactions of Heterodiamondoids

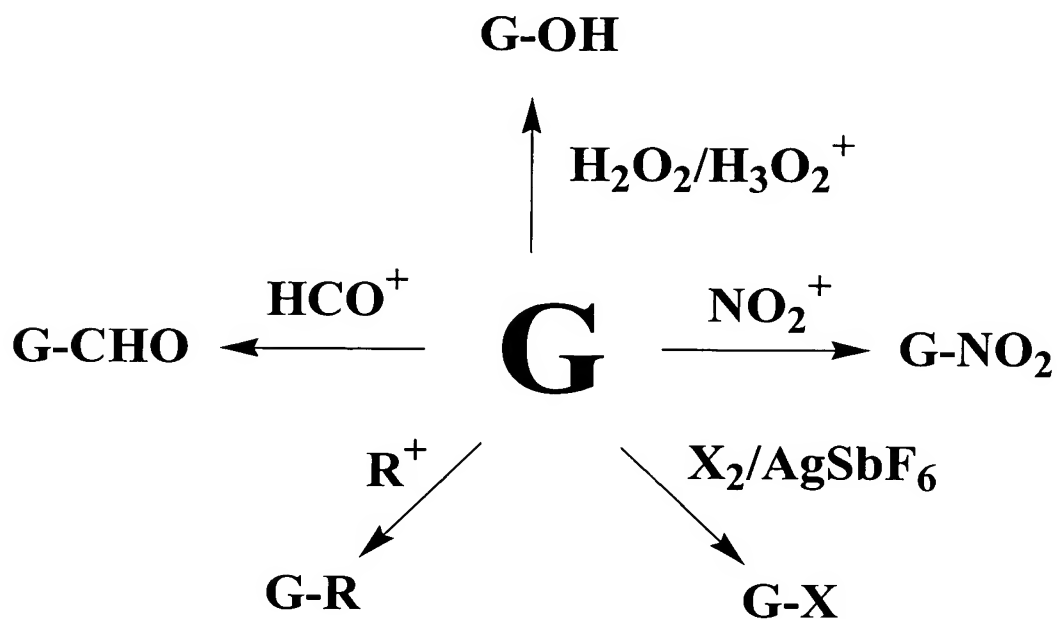


FIG. 13

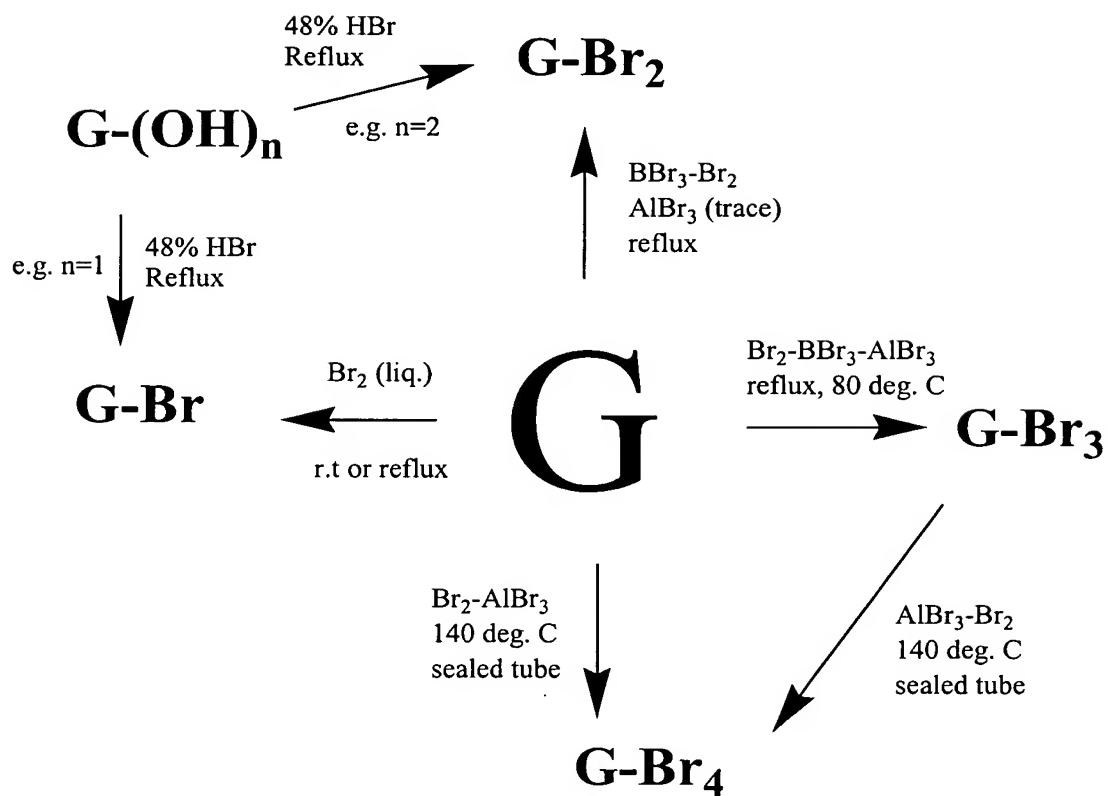


FIG. 14

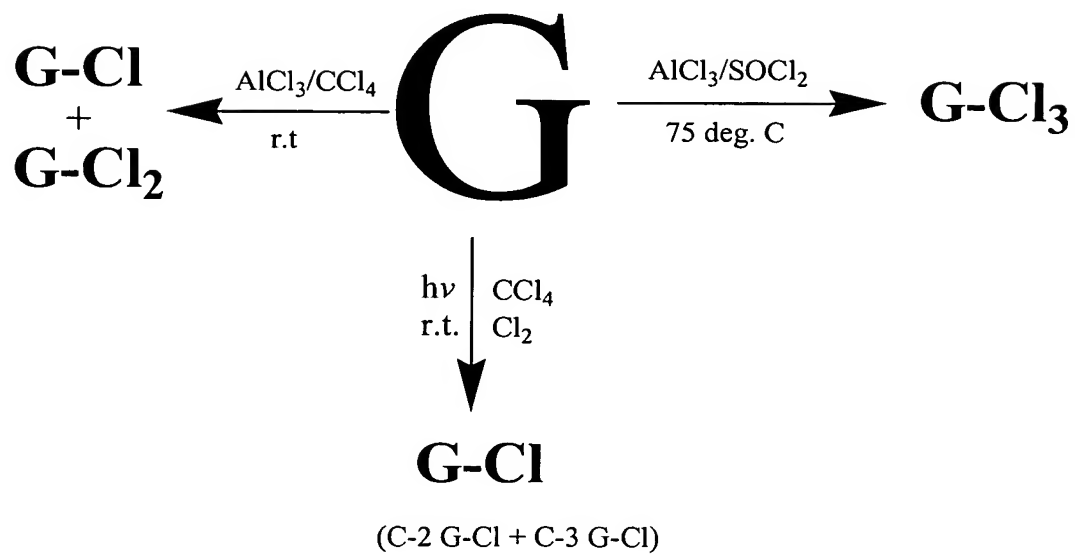


FIG. 15

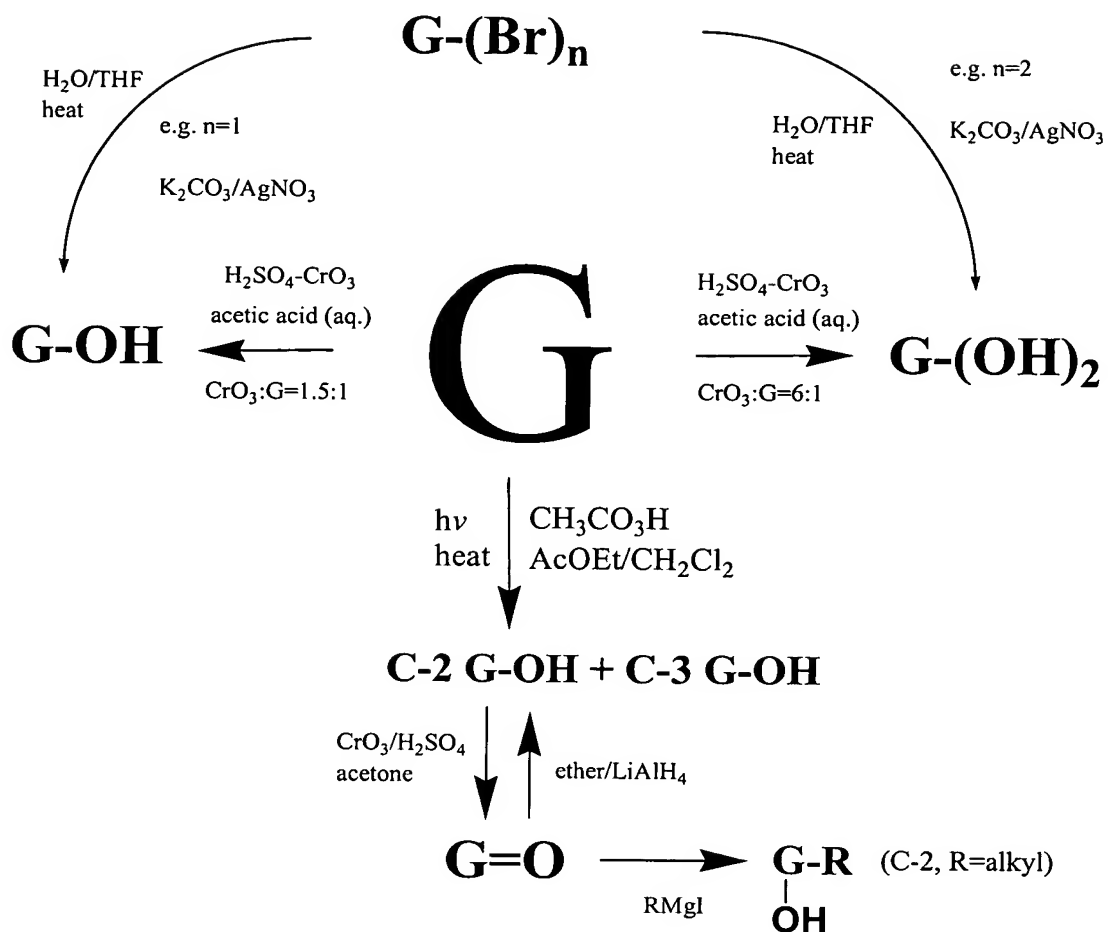


FIG. 16

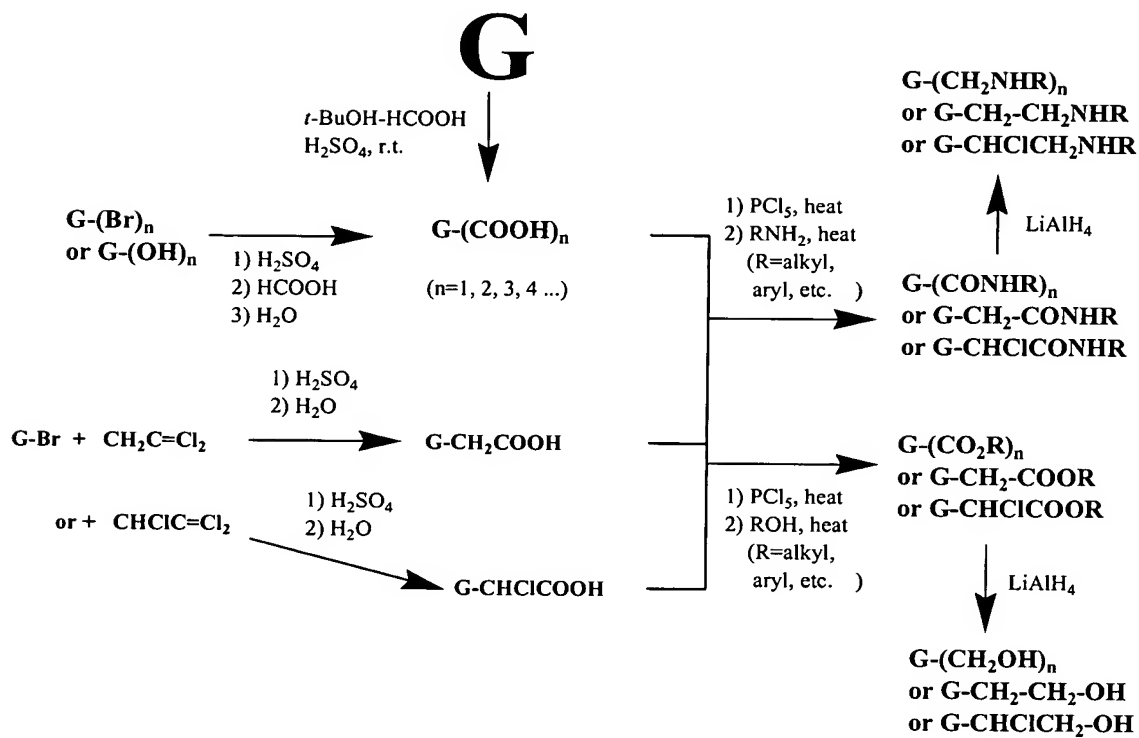


FIG. 17

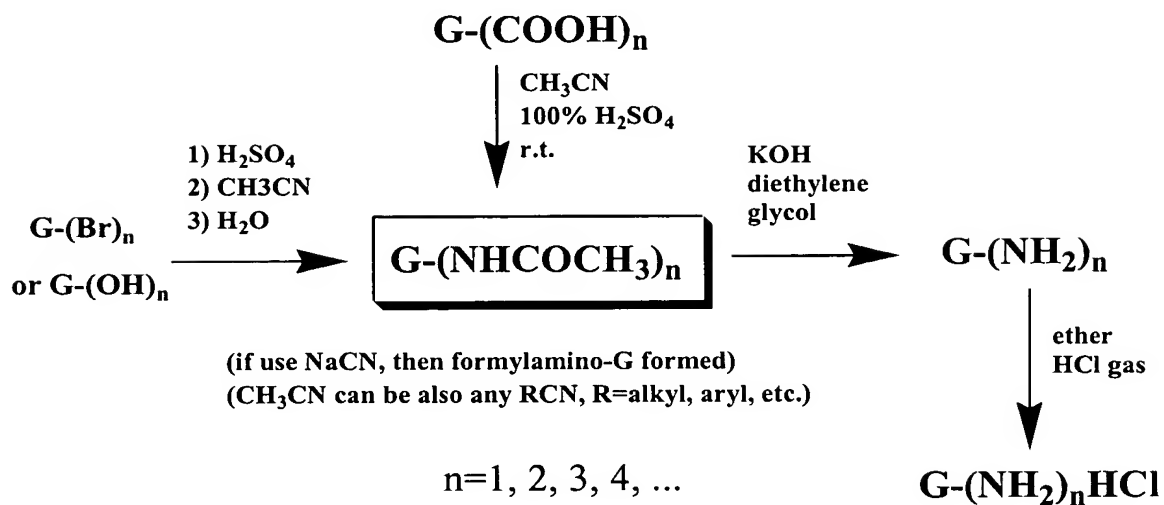


FIG. 18

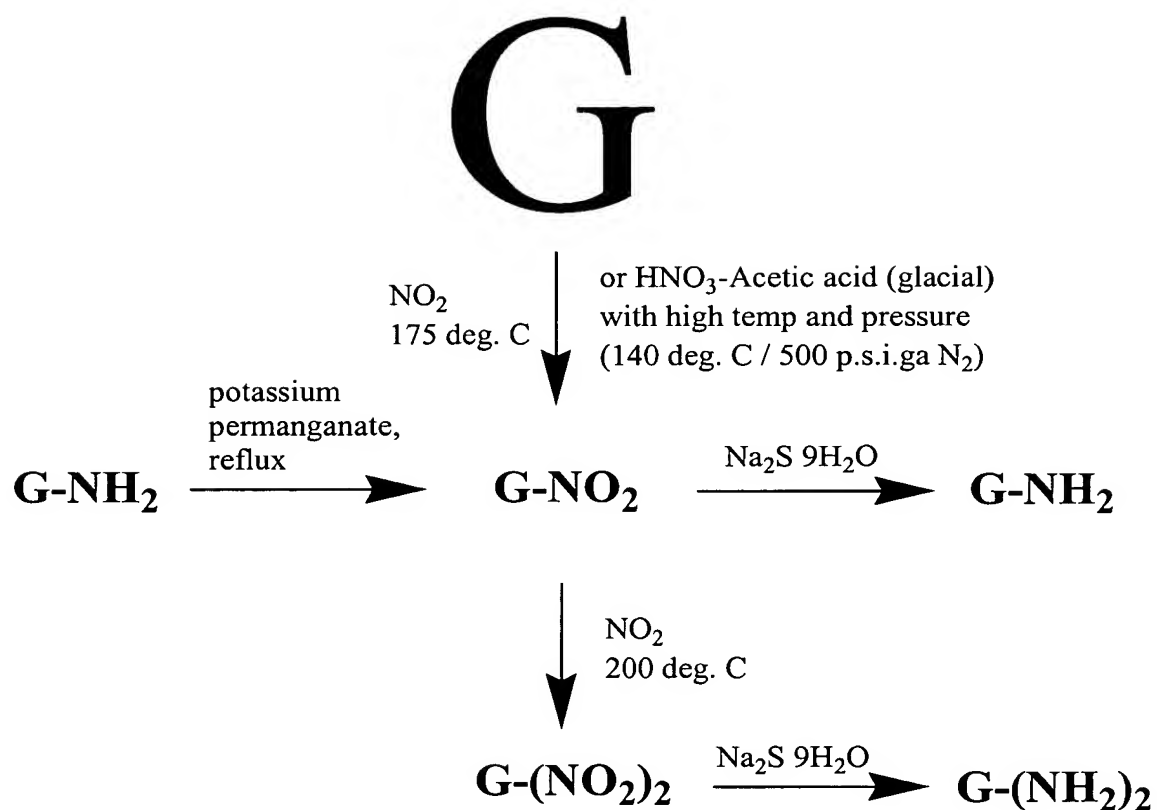


FIG. 19

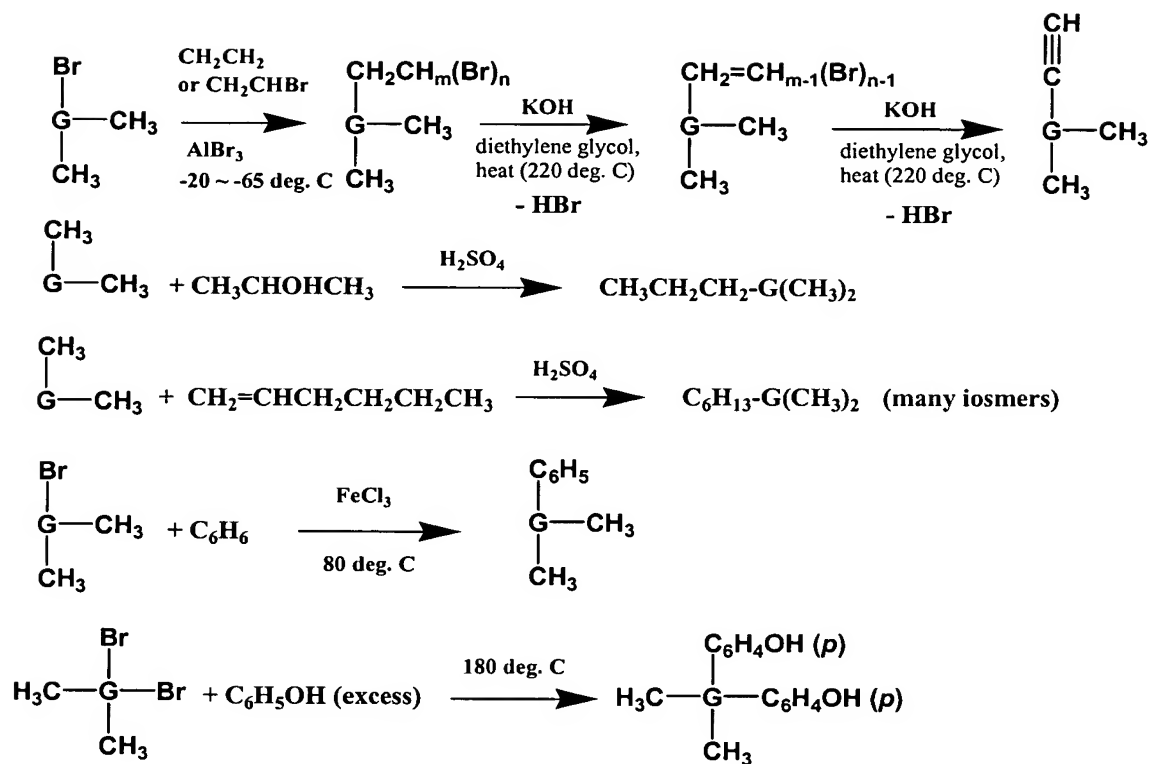


FIG. 20

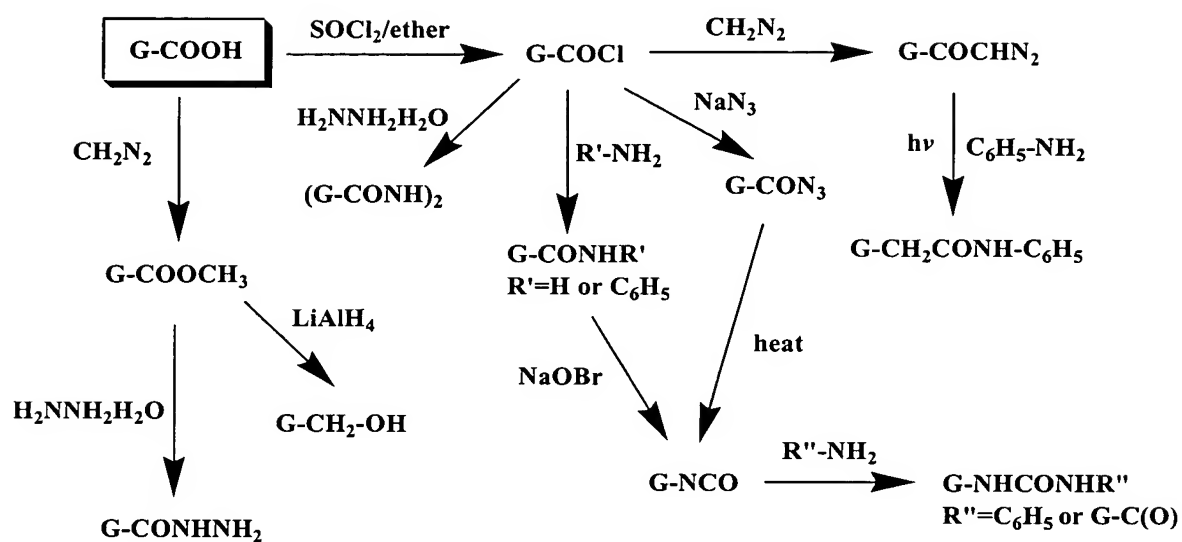


FIG. 21

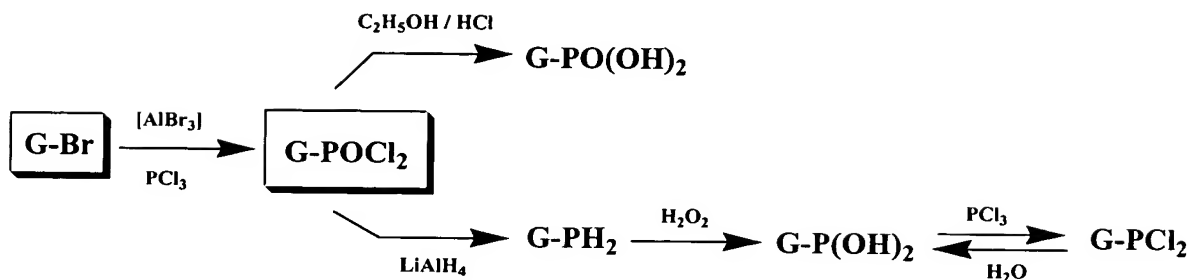


FIG. 22

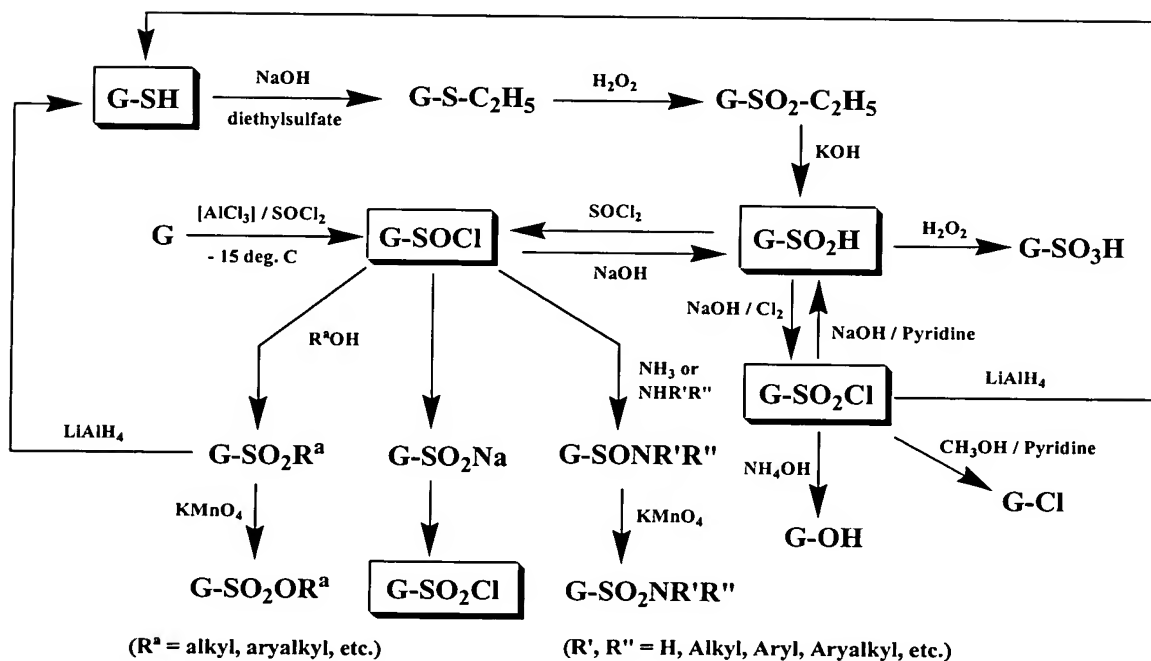


FIG. 23

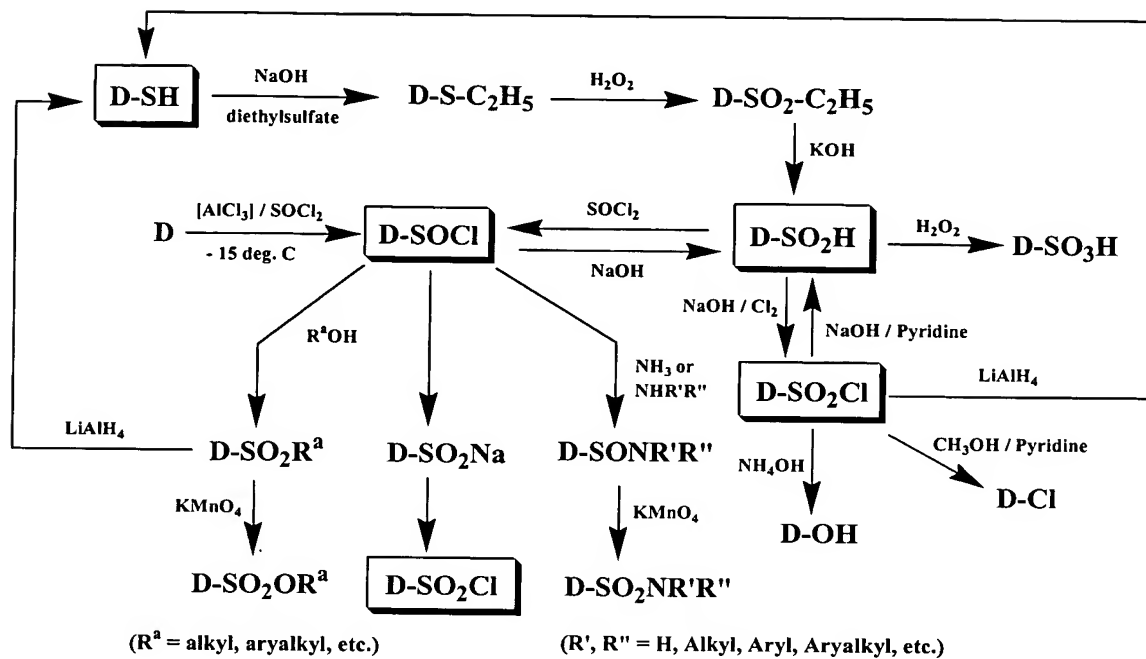


FIG. 24

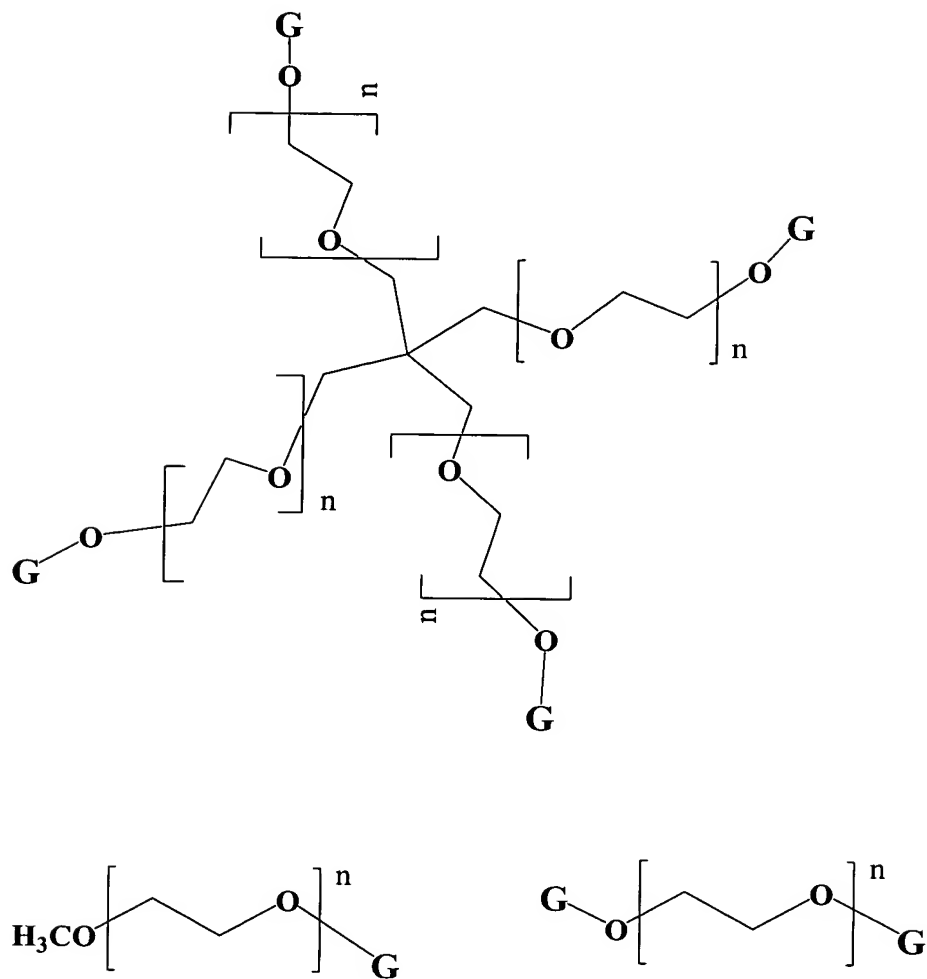


FIG. 25

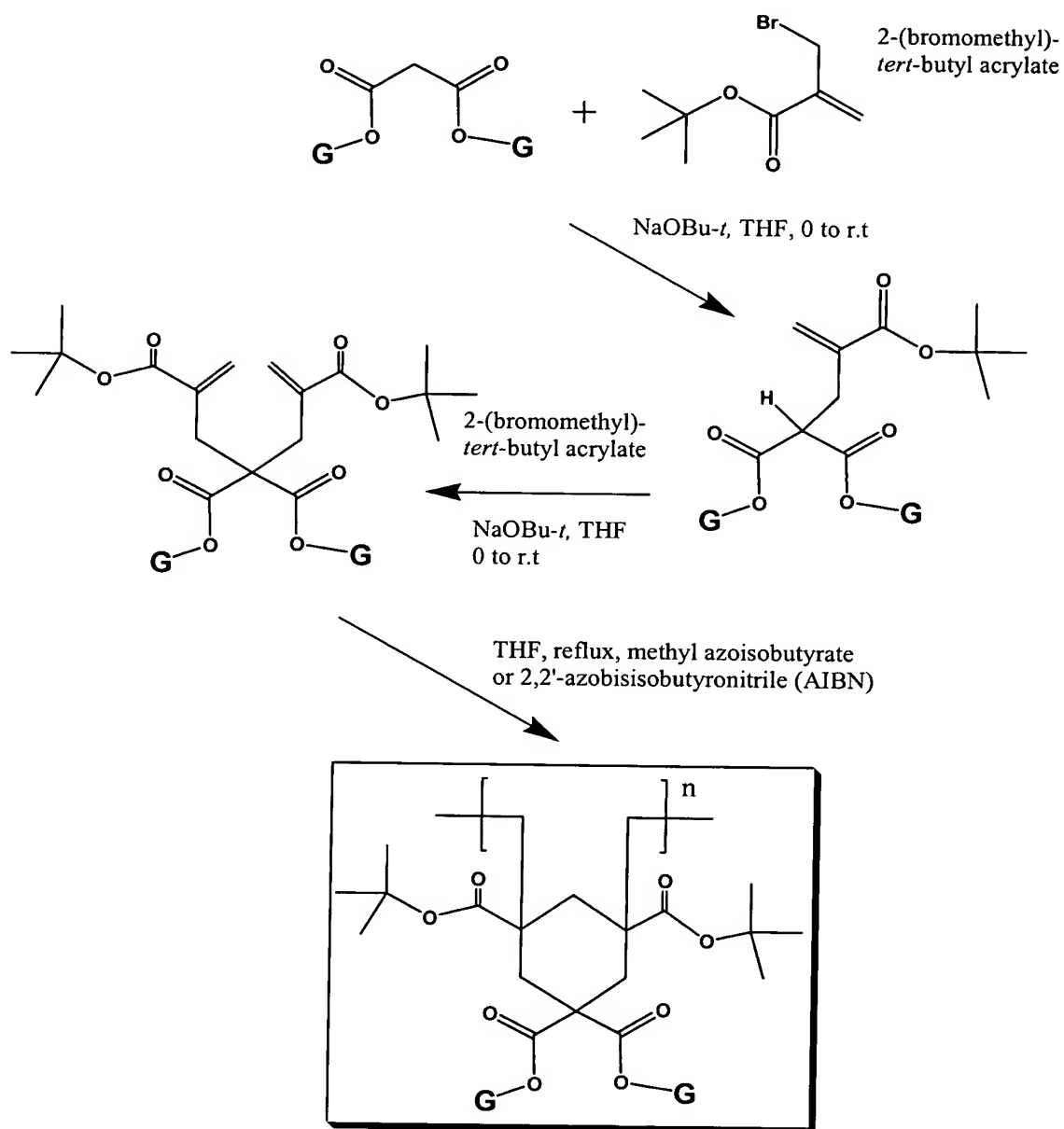


FIG. 26

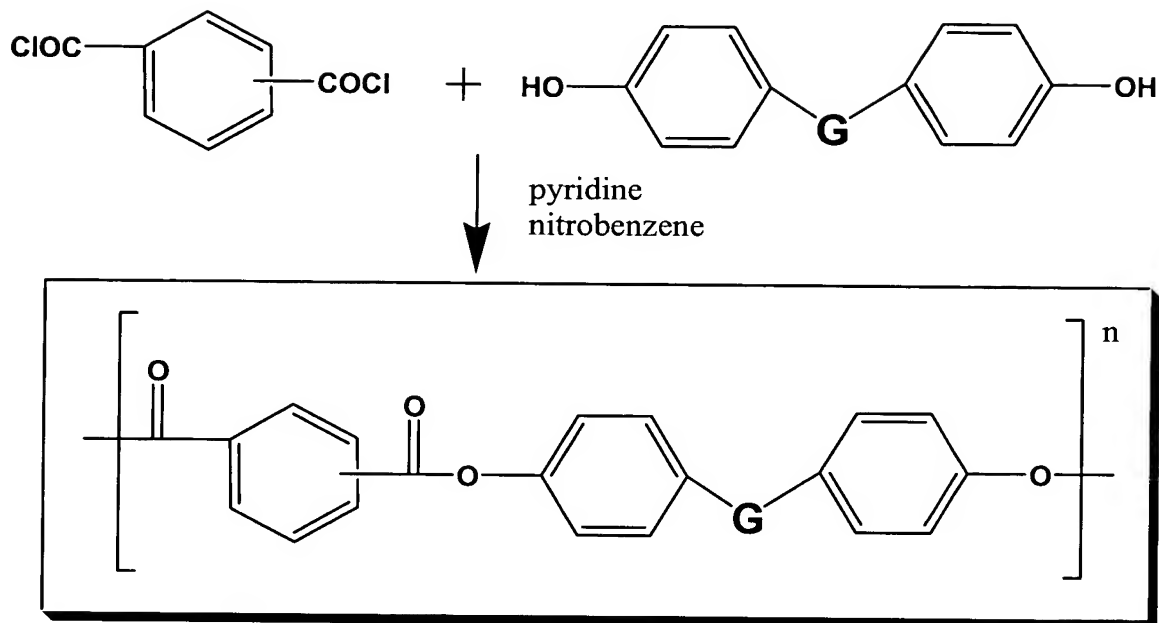


FIG. 27

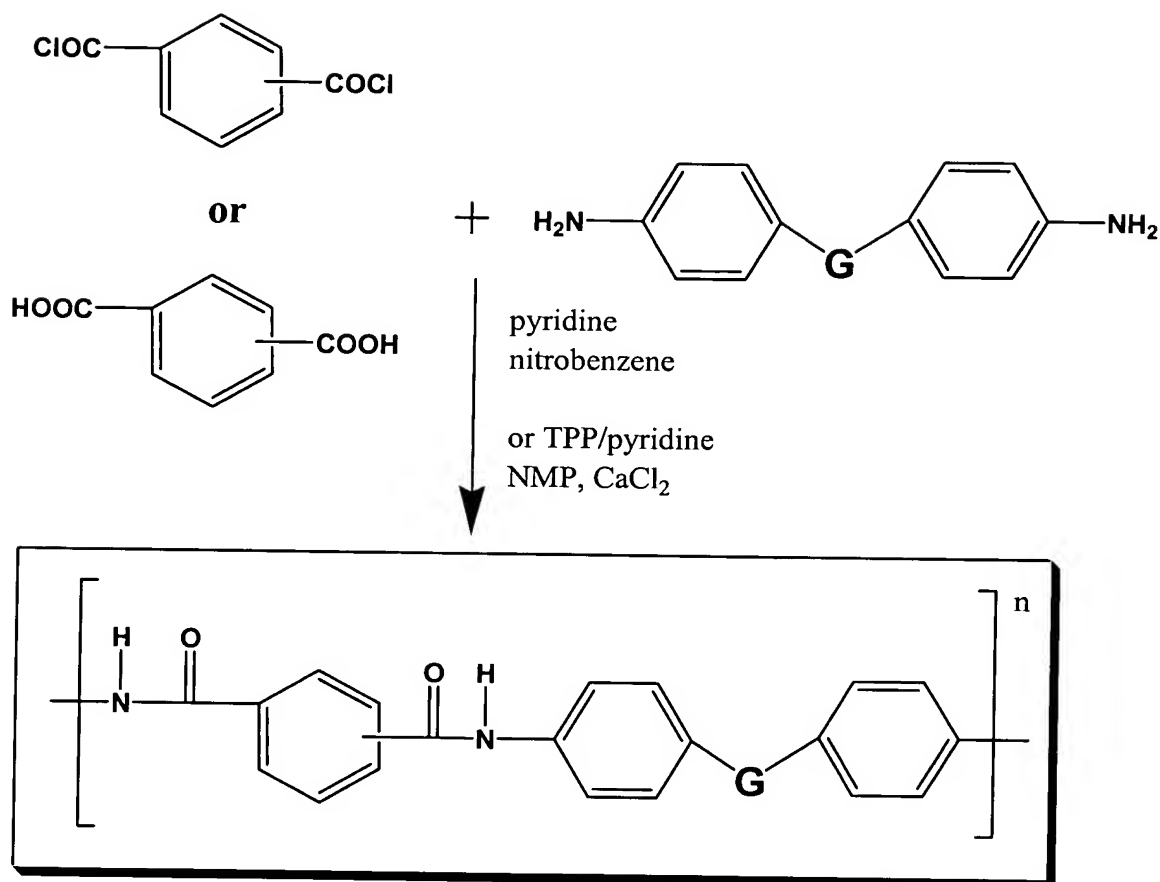


FIG. 28

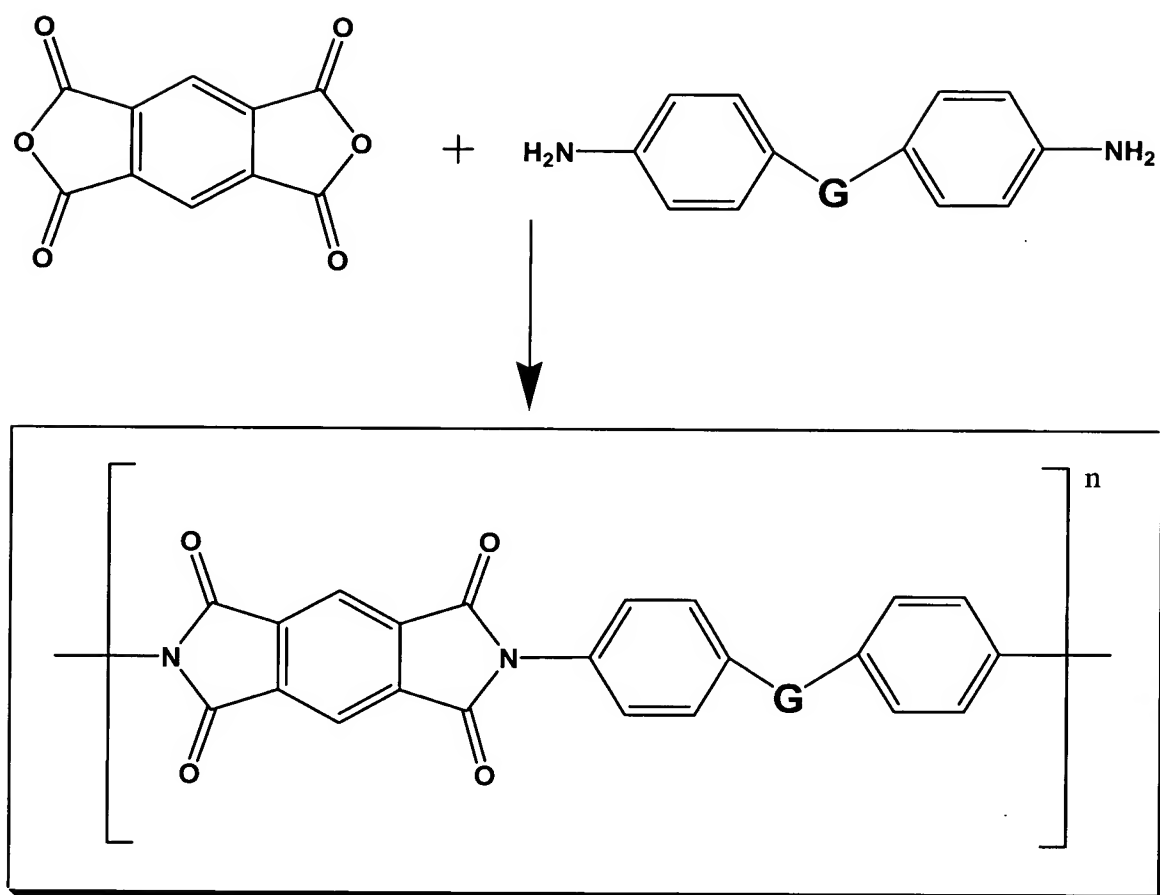


FIG. 30

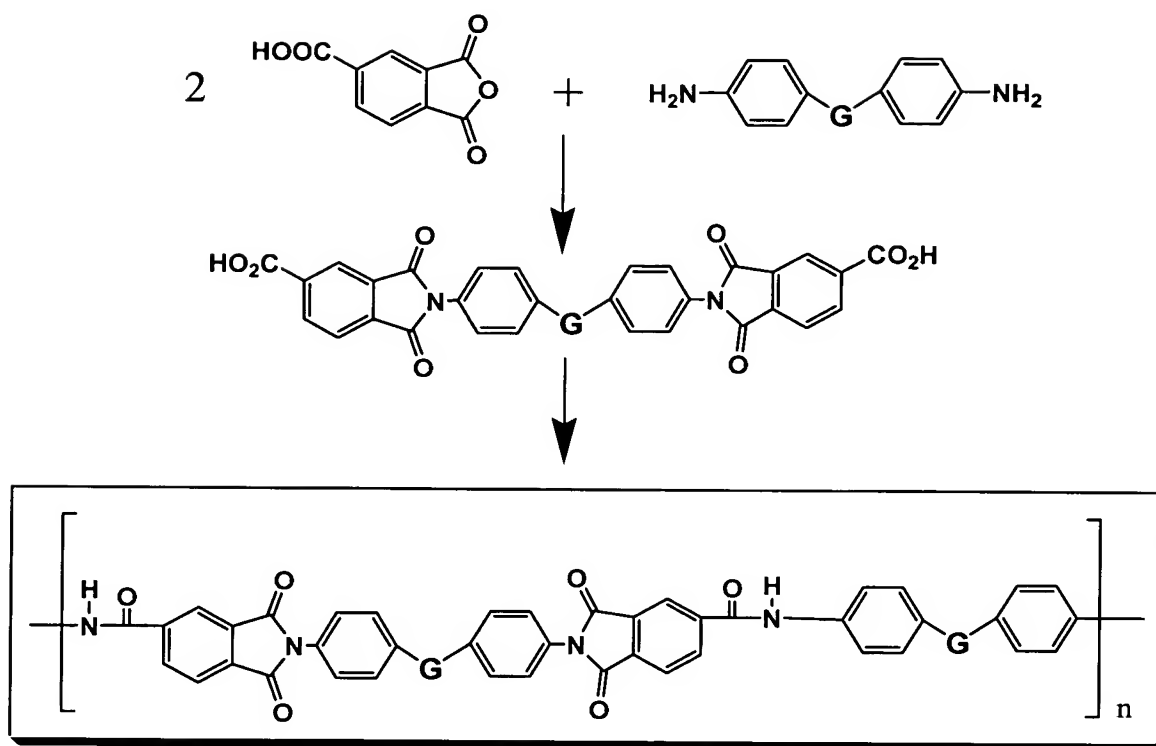


FIG. 31

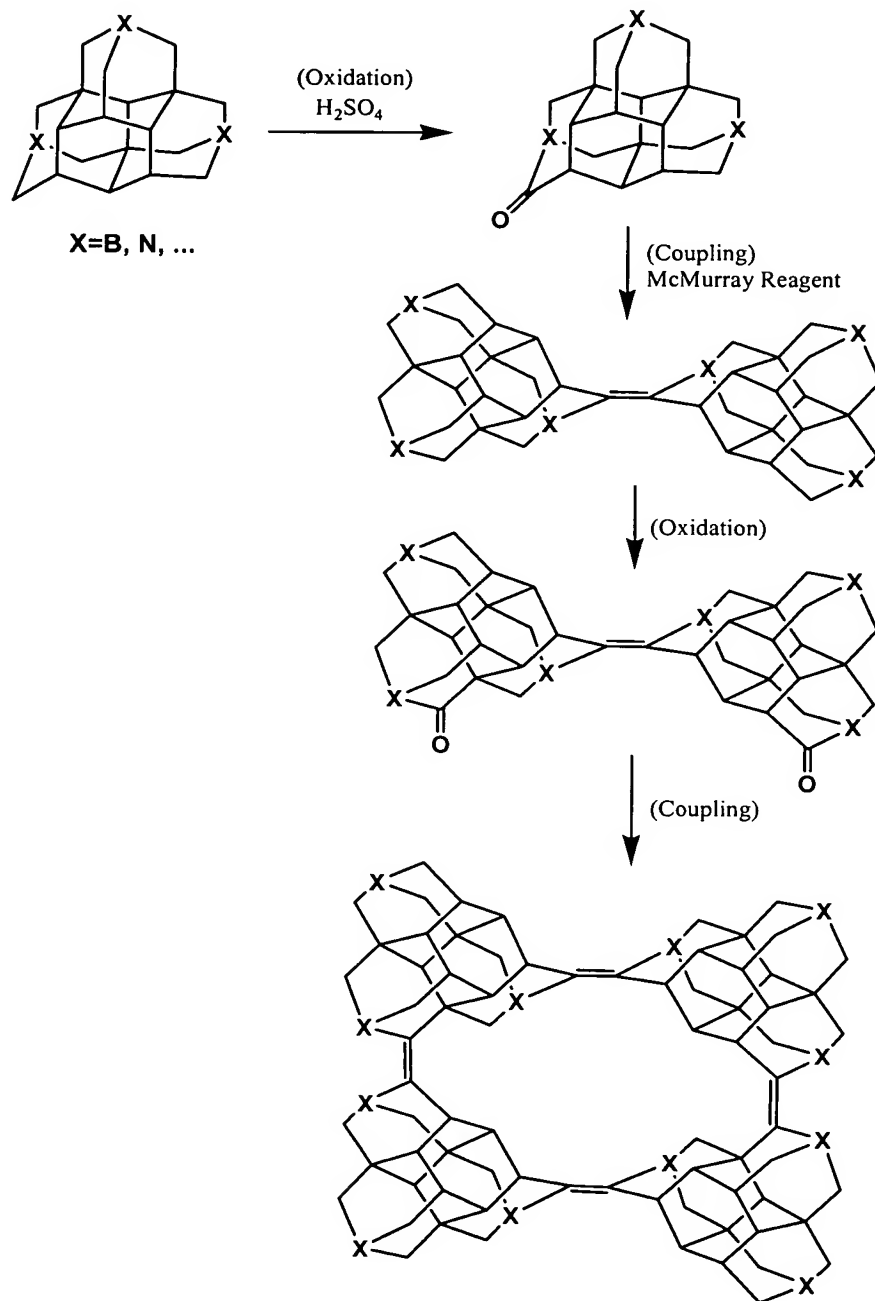


FIG. 32

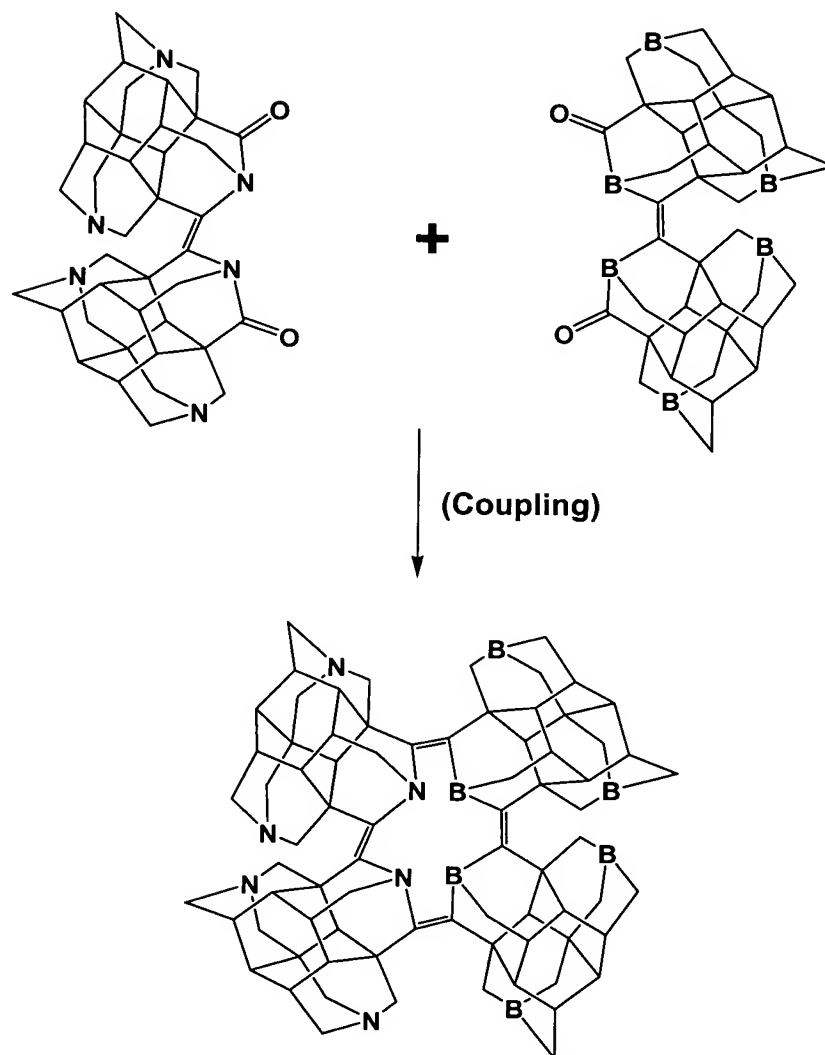


FIG. 33

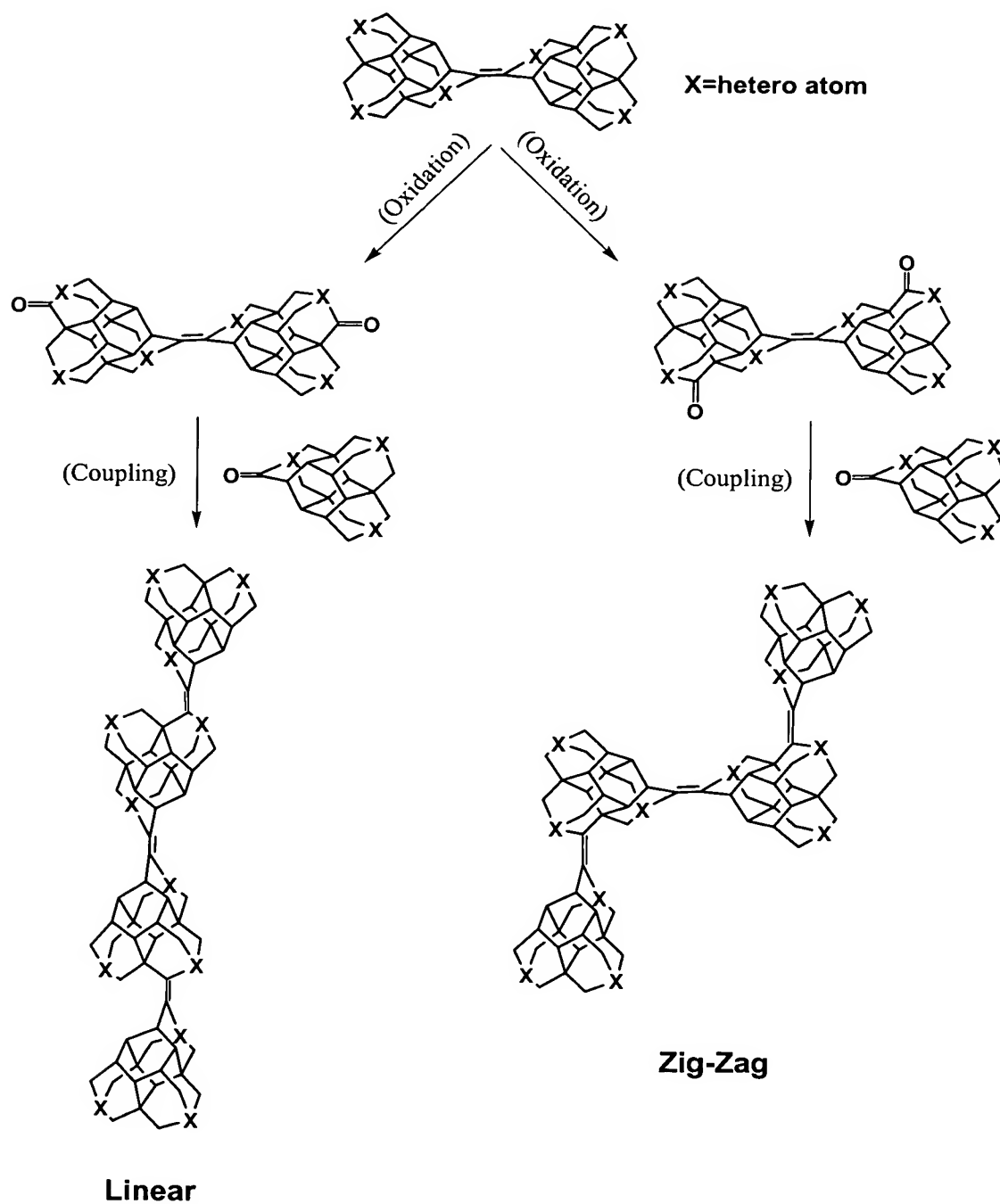


FIG. 34

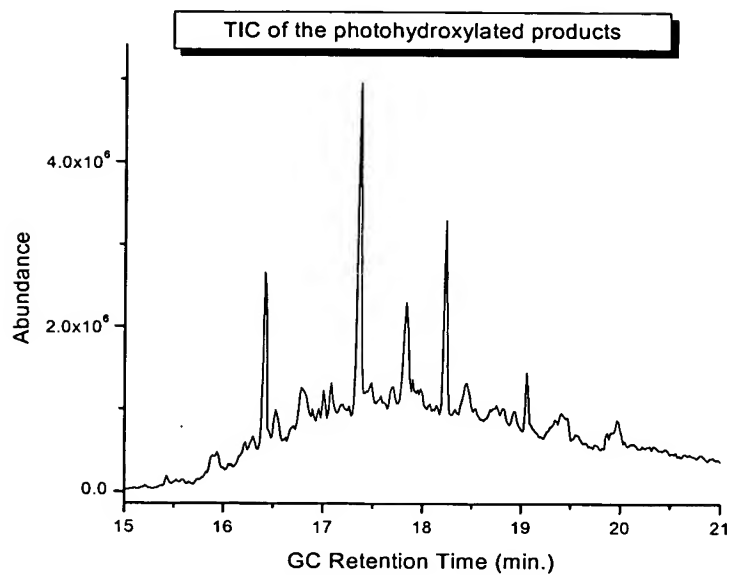


FIG. 35

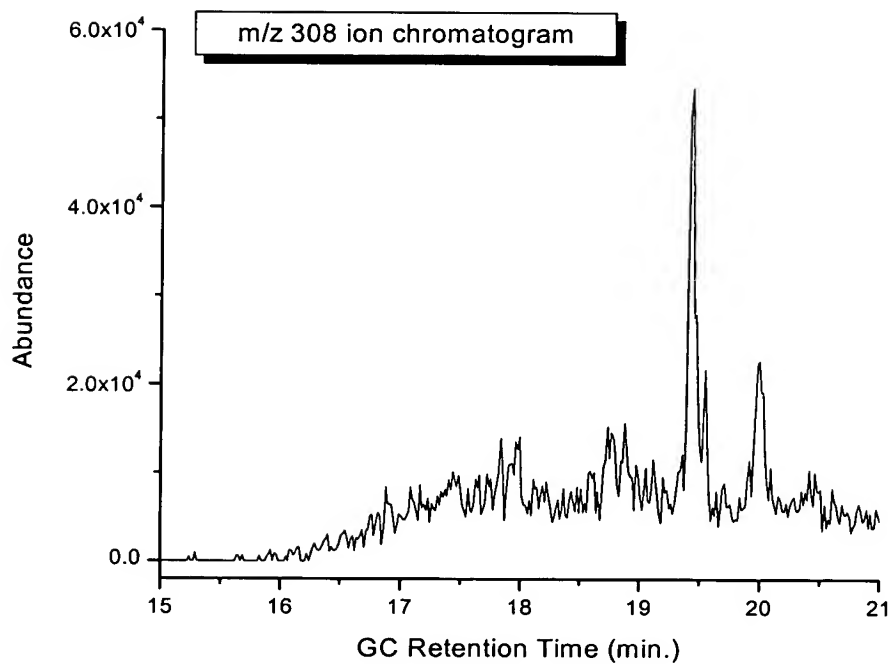


FIG. 36

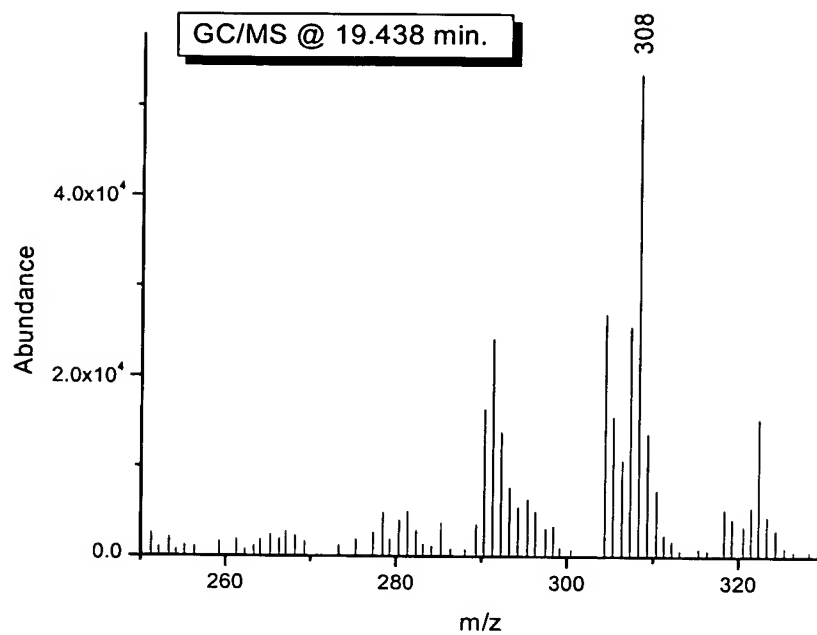


FIG. 37

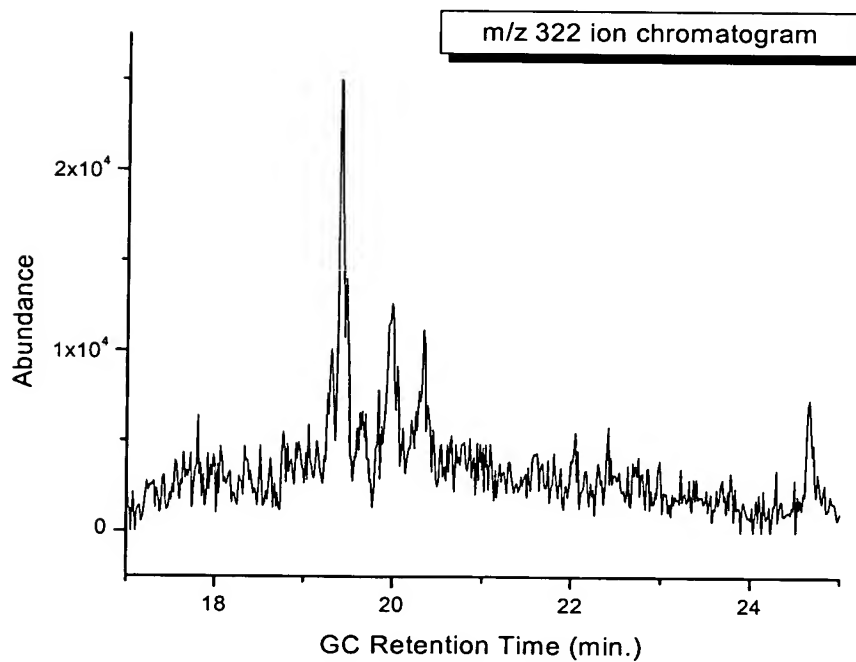


FIG. 38

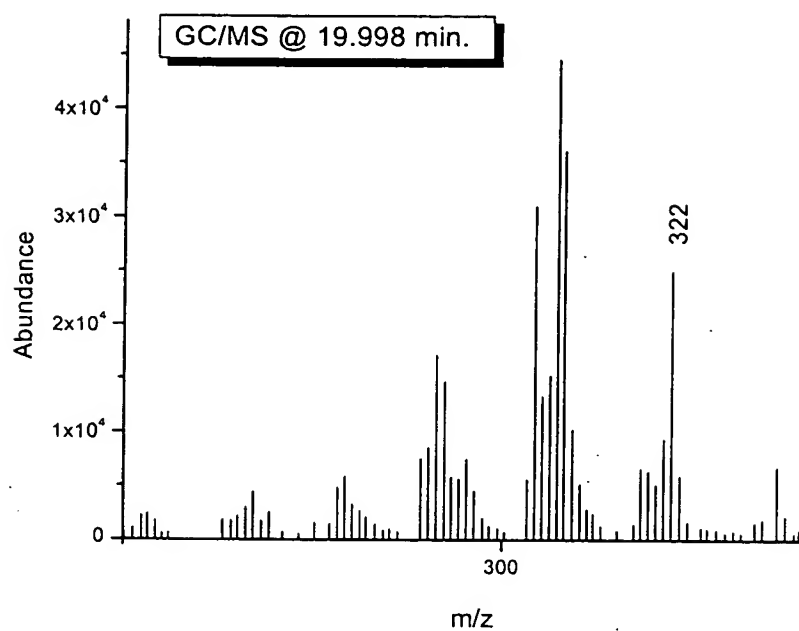


FIG. 39

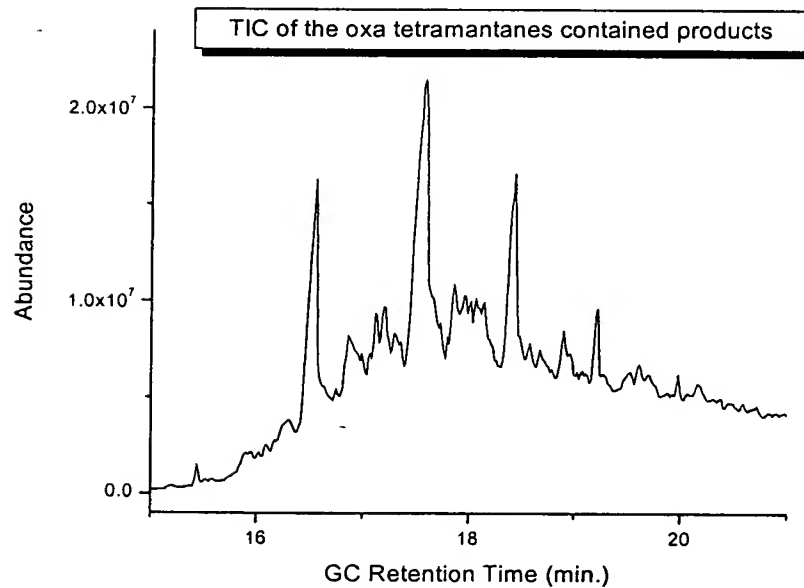


FIG. 40

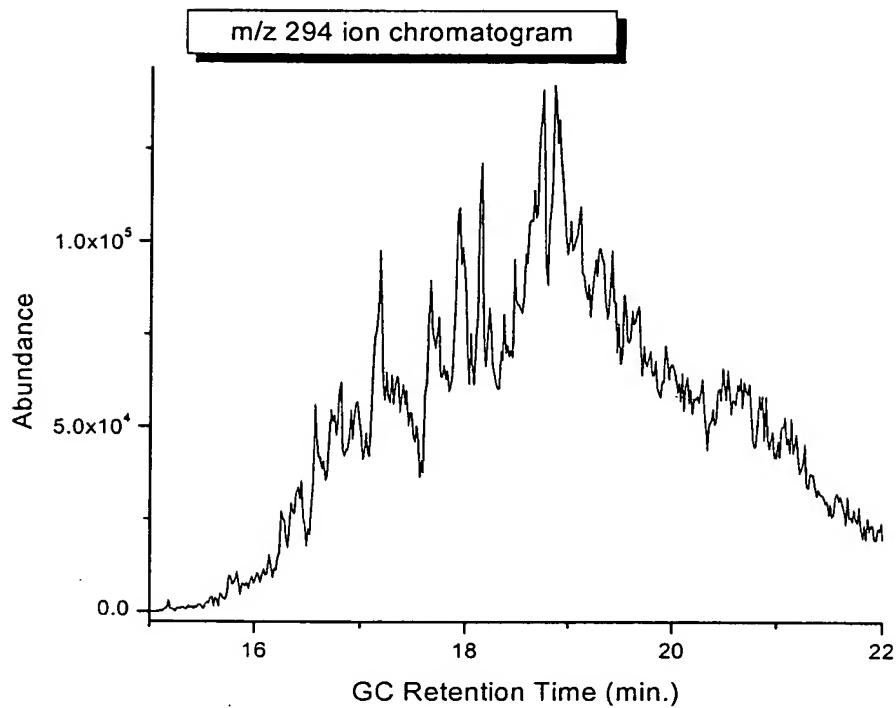


FIG. 41

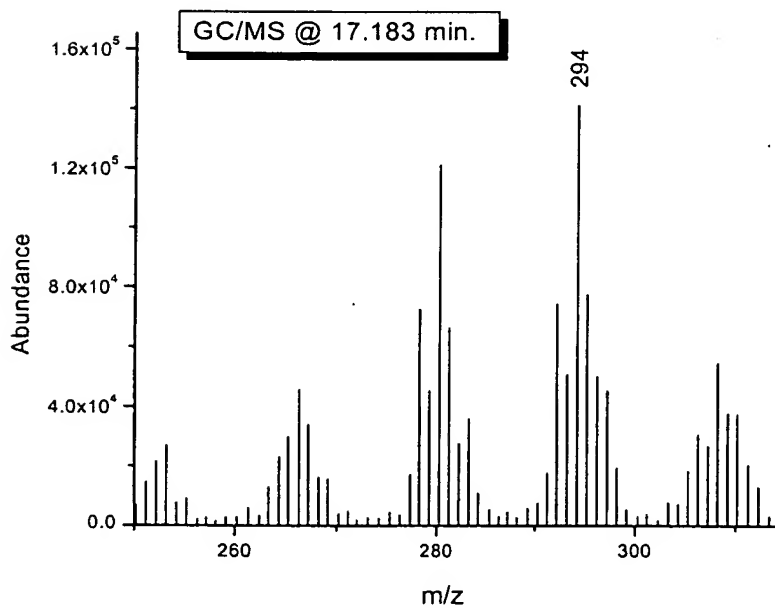


FIG. 42

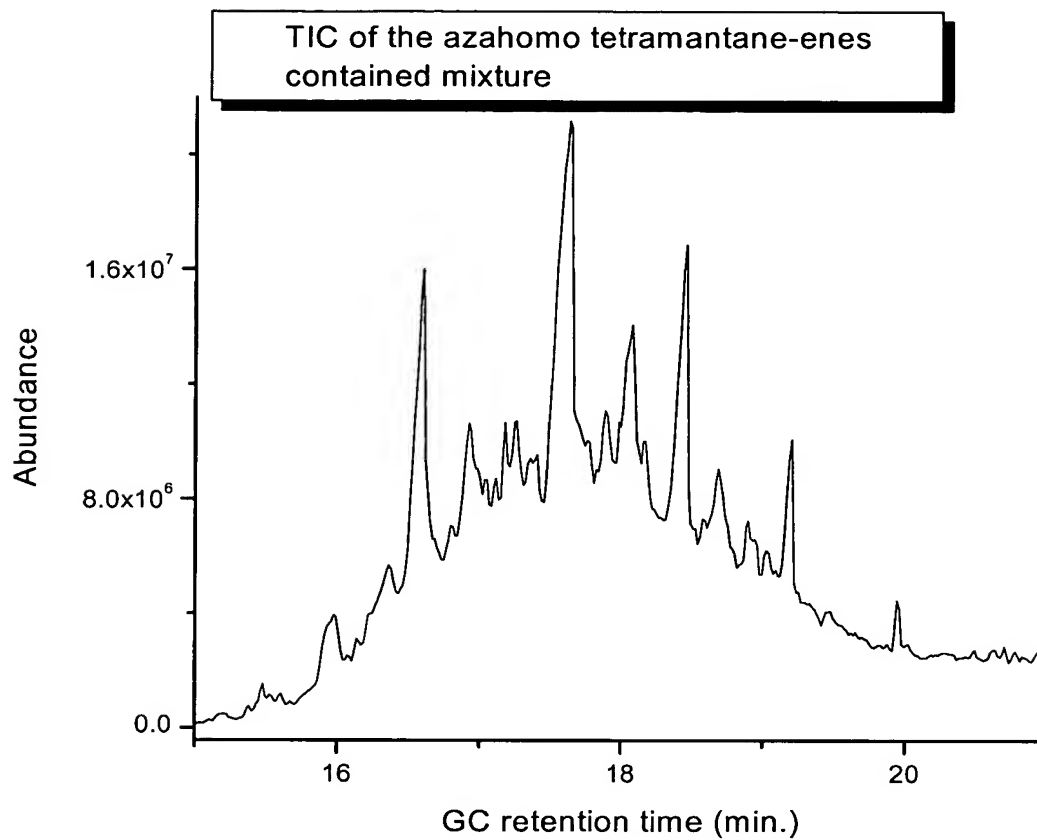


FIG. 43

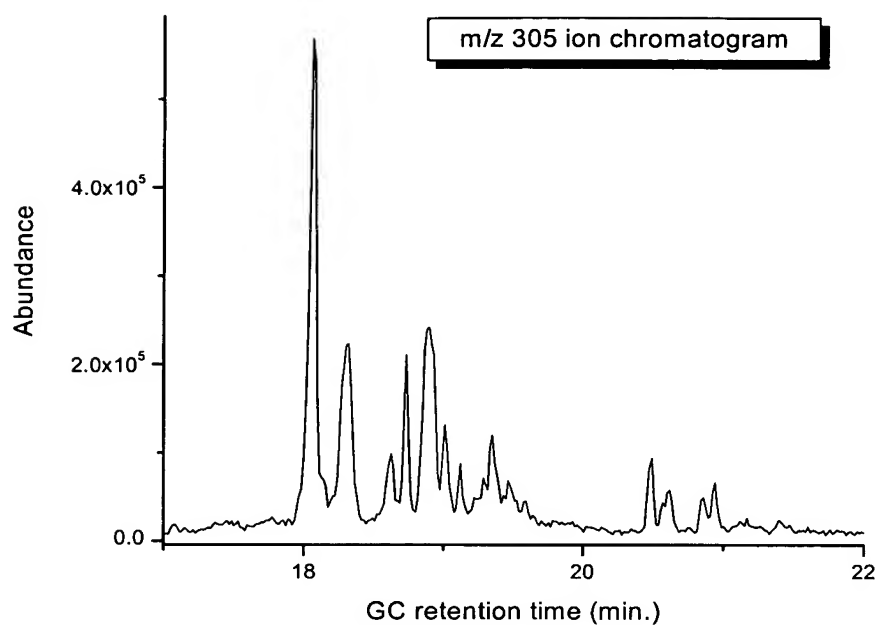


FIG. 44

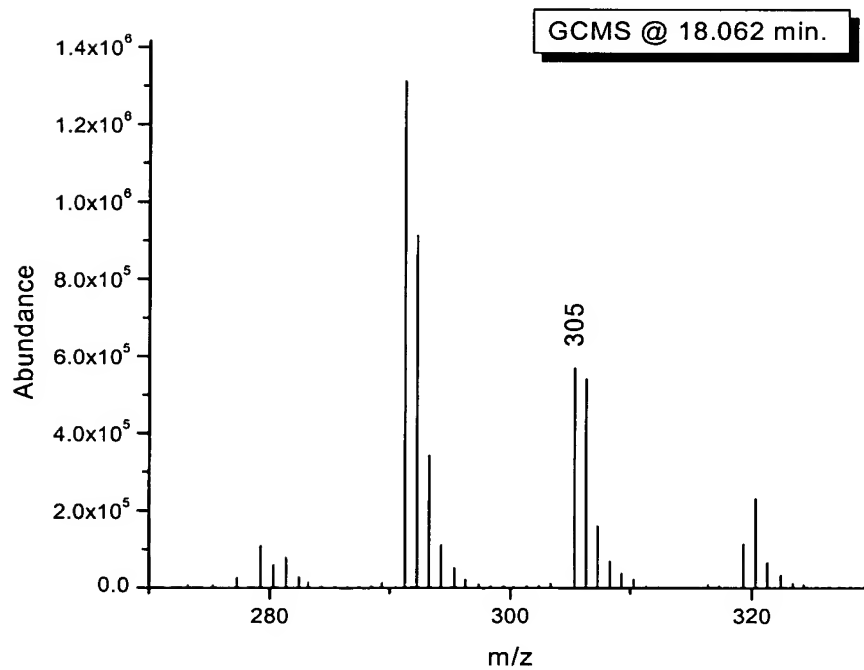


FIG. 45

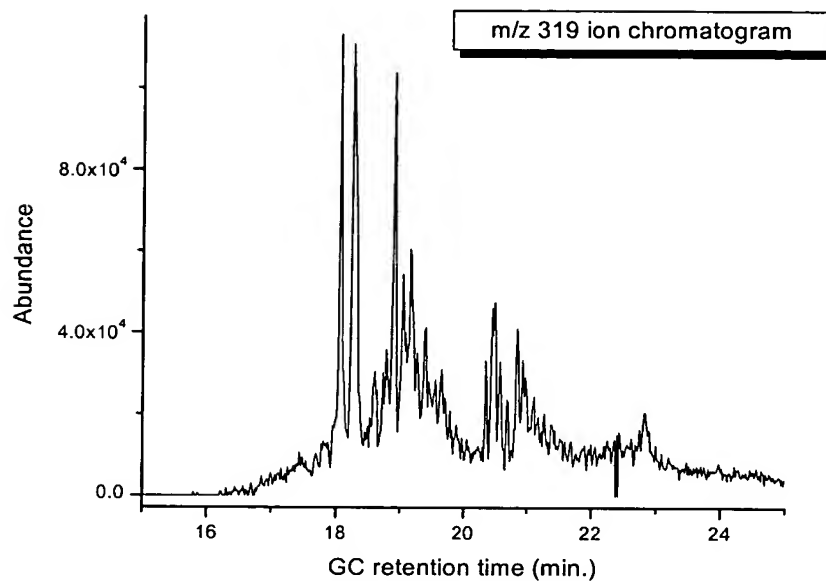


FIG. 46

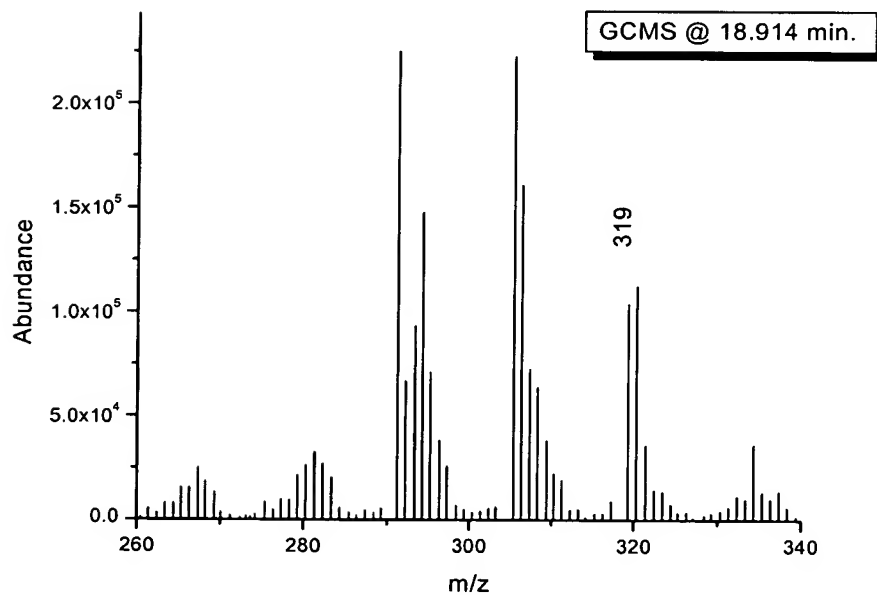


FIG. 47

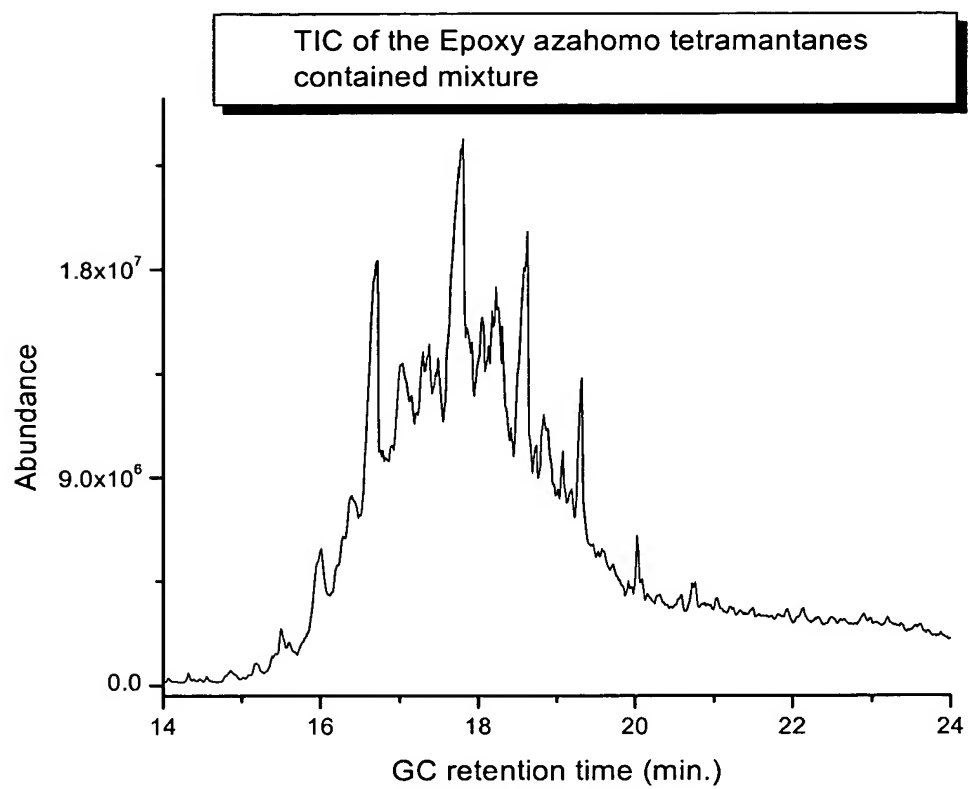


FIG. 48

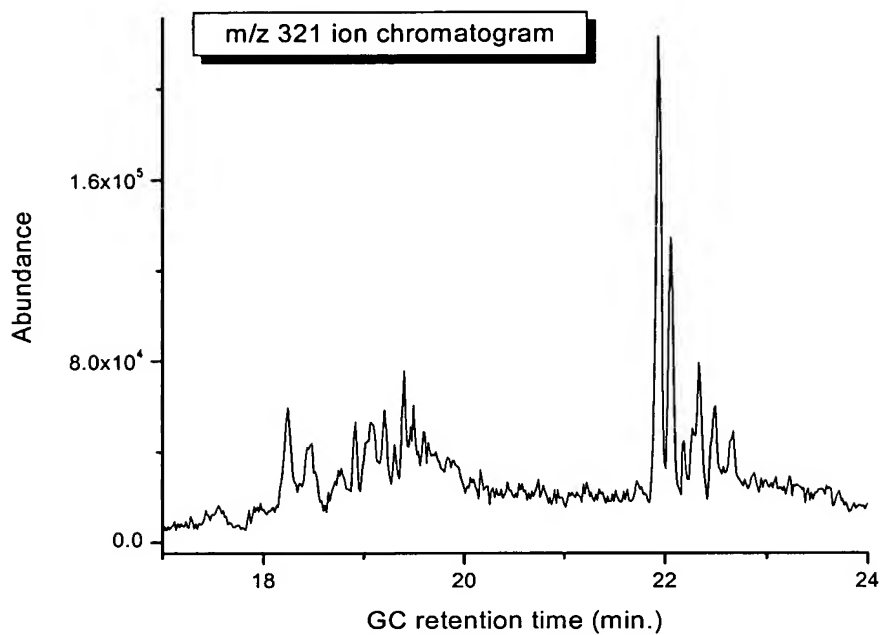


FIG. 49

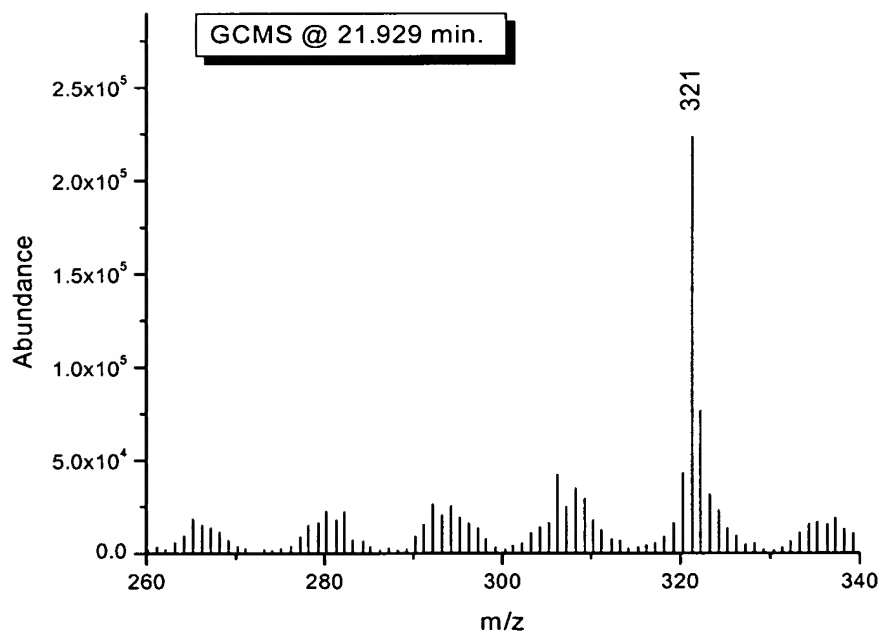


FIG. 50

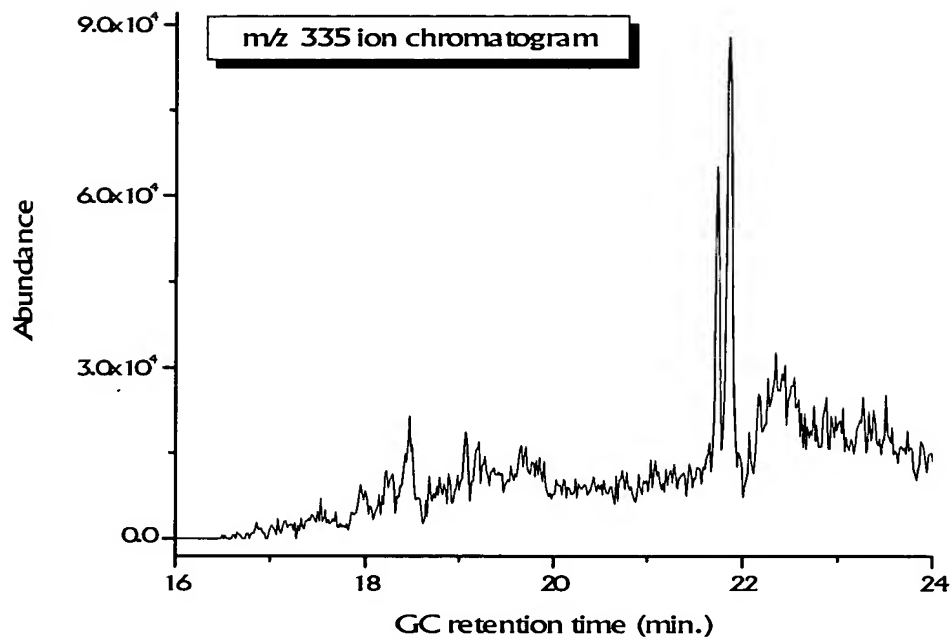


FIG. 51

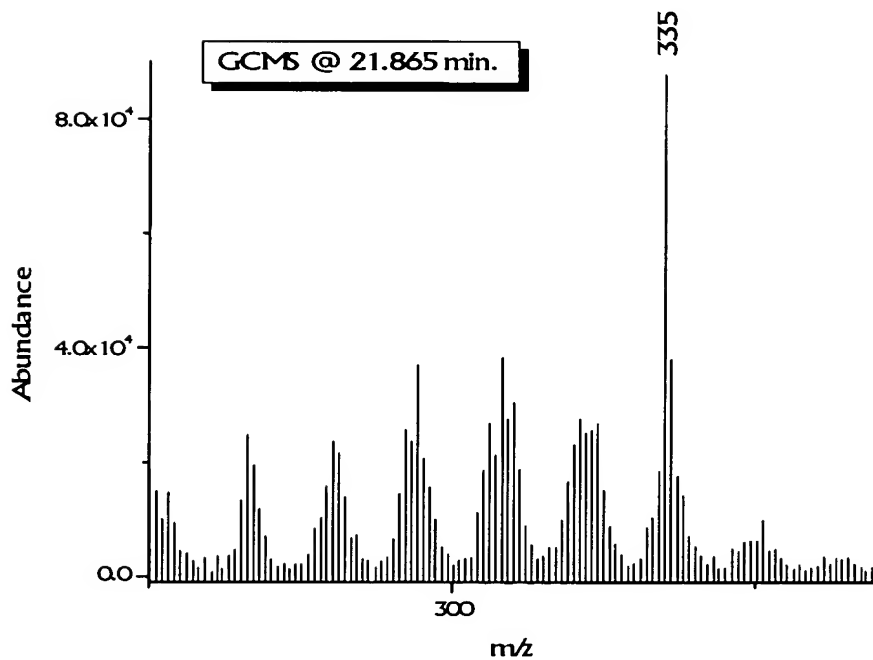


FIG. 52

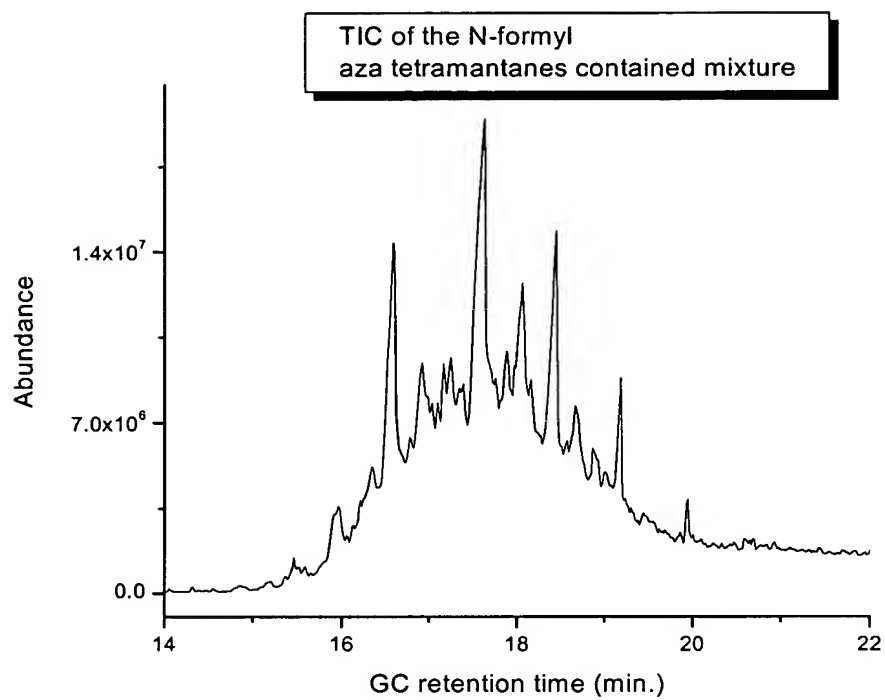


FIG. 53

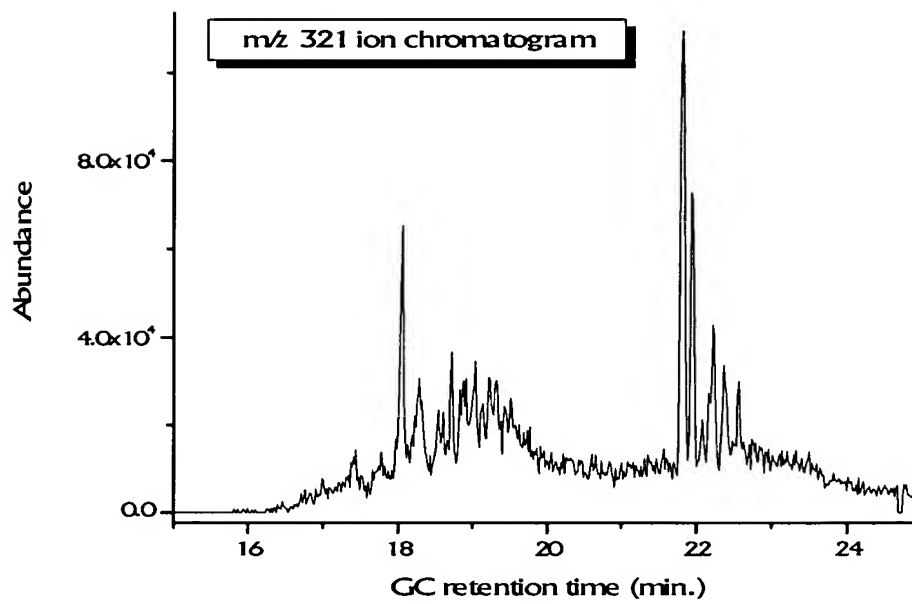


FIG. 54

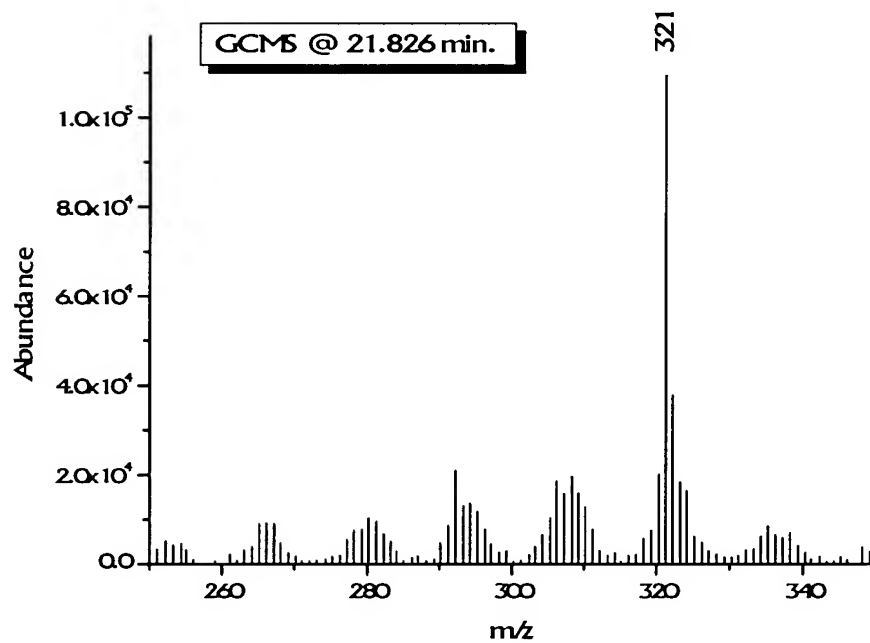


FIG. 55

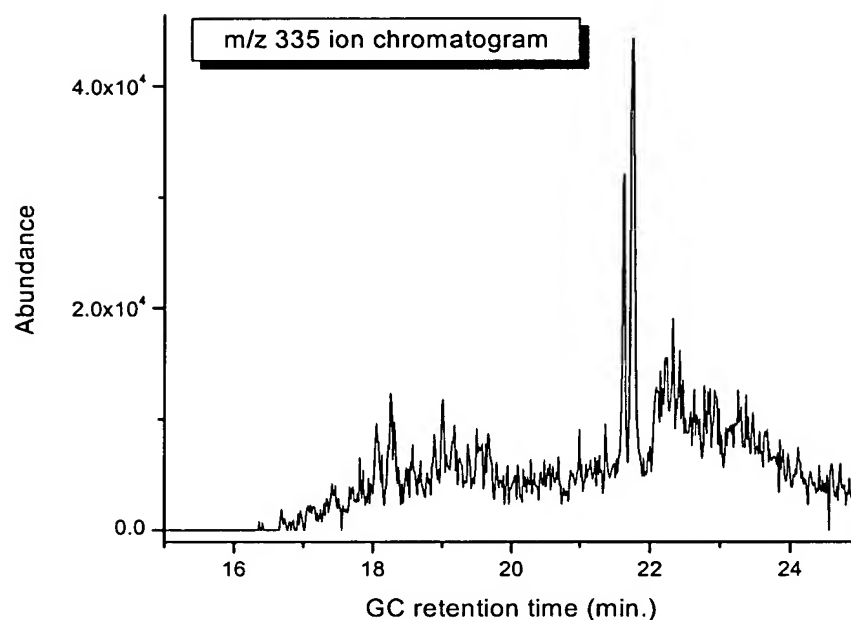


FIG. 56

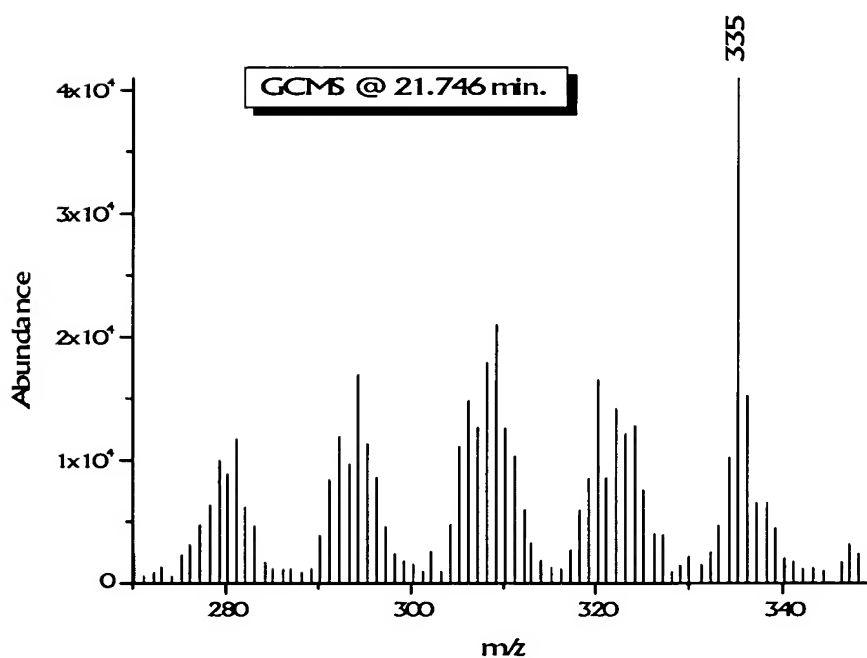


FIG. 57

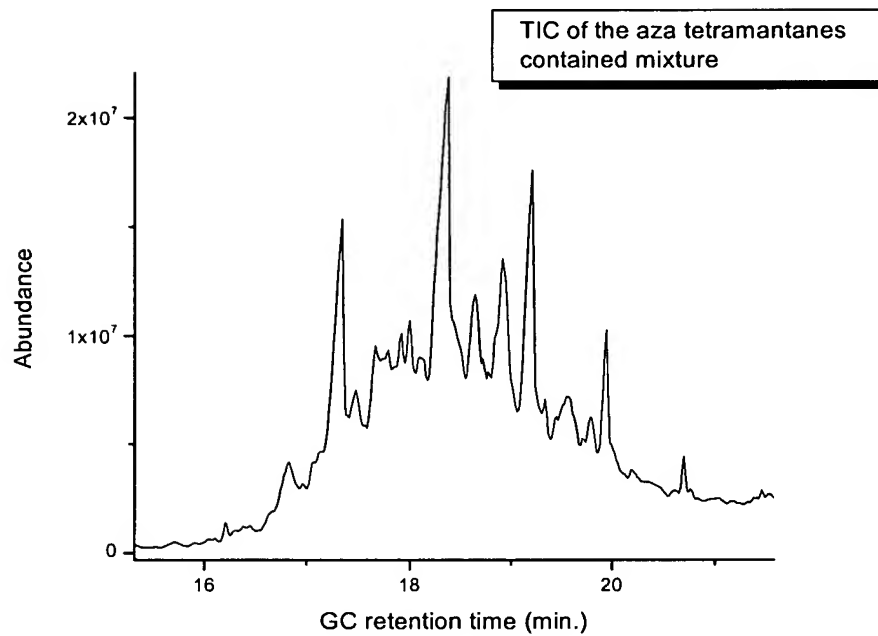


FIG. 58

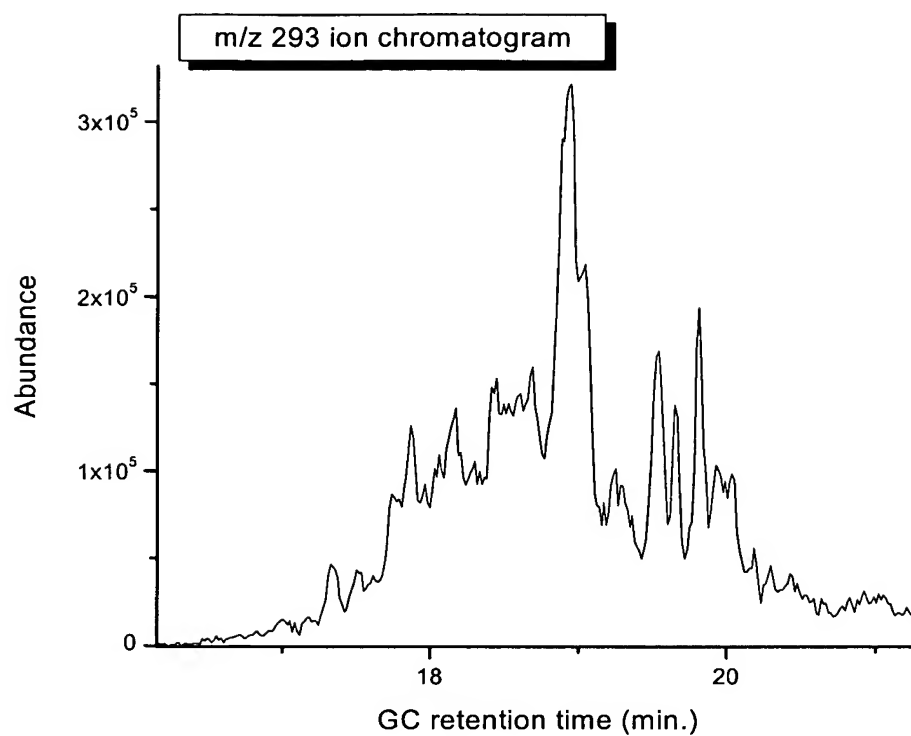


FIG. 59

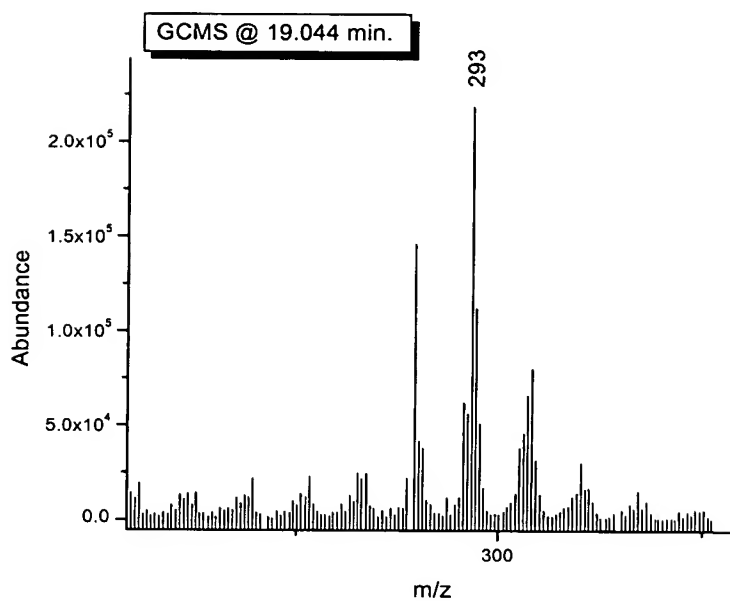


FIG. 60

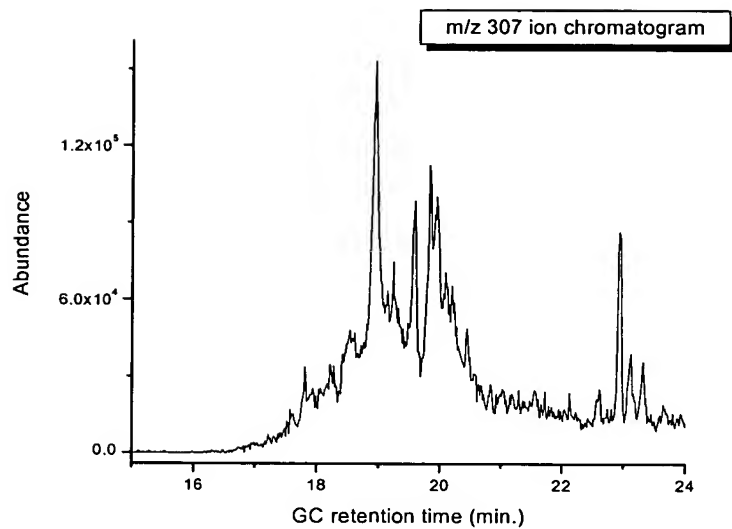


FIG. 61

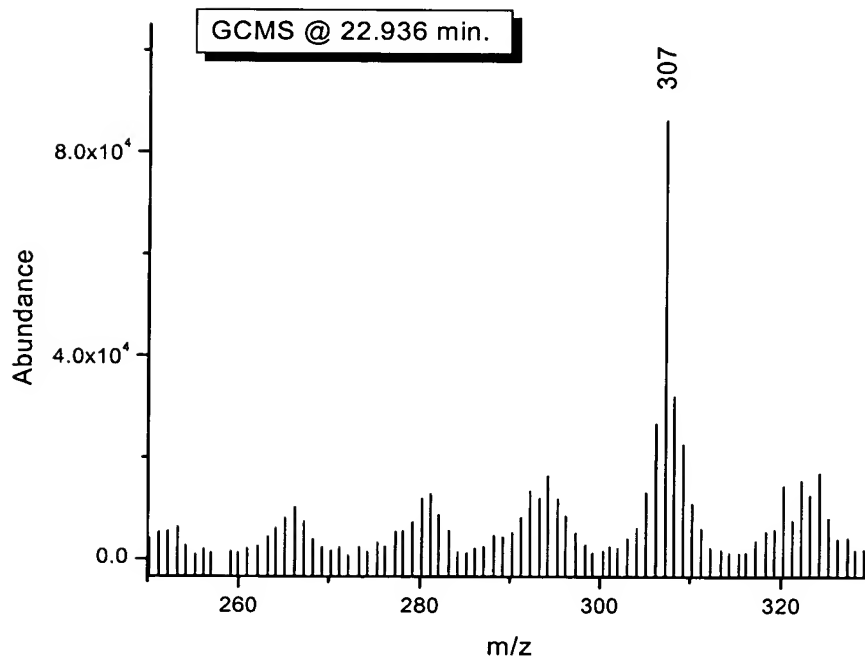


FIG. 62

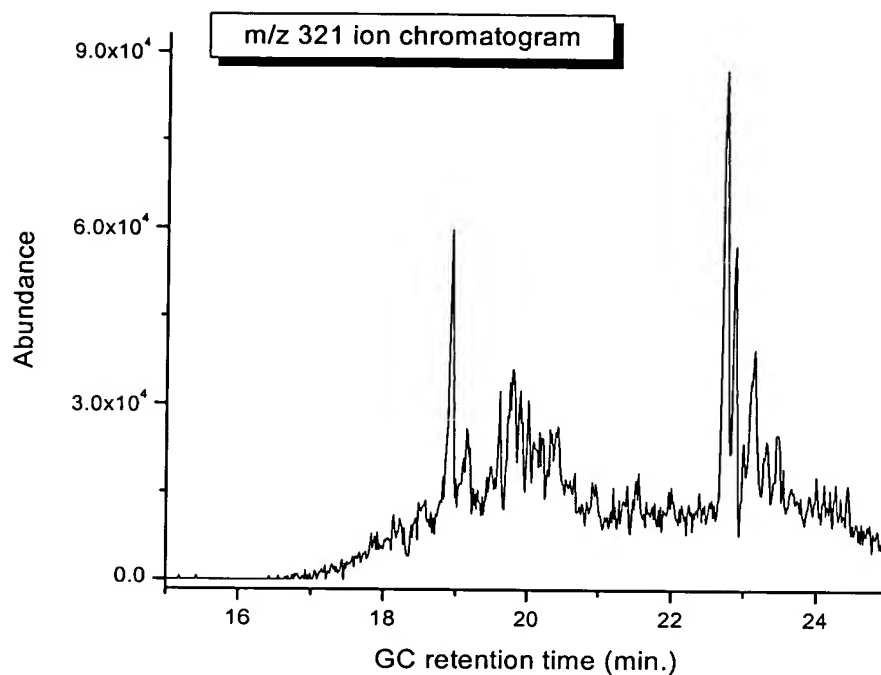


FIG. 63

